09/910009

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M protein - protein search, using sw model

Run on: November 17, 2003, 16:04:42 ; Search time 5.89474 Seconds
(without alignments)
143.555 Million cell updates/sec

Title: US-09-910-009A-211
Perfect score: 121
Sequence: 1 XNCCNGGCSSKXCRDHARCC 20

Scoring table: BLOSUM62
                Gapop 10.0 , Gapext 0.5

Searched: 328717 seqs, 42310858 residues

Total number of hits satisfying chosen parameters: 328717

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Database :   Issued_Patents_AA:*
                 1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
                 2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
                 3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
                 4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
                 5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
                 6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Match	Query Length	DB	ID	Description
1	58	47.9	1417	4	US-08-900-230-3	Sequence 3, Appli
2	57	47.1	2211	4	US-09-738-884-1	Sequence 1, Appli
3	54	44.6	58	1	US-08-279-058B-23	Sequence 23, Appli
4	54	44.6	58	4	US-08-828-323-23	Sequence 23, Appl
5	54	44.6	232	4	US-09-252-991A-23648	Sequence 23648, A
6	53	43.8	40	4	US-09-003-198A-14	Sequence 14, Appl
7	53	43.8	67	4	US-09-003-198A-16	Sequence 16, Appli
8	52.5	43.4	1345	2	US-08-599-767-3	Sequence 3, Appli
9	52.5	43.4	1400	4	US-08-630-915A-37	Sequence 37, Appl
10	50	41.3	2088	4	US-09-548-372D-13	Sequence 13, Appl
11	50	41.3	2088	4	US-09-548-367D-13	Sequence 13, Appl
12	50	41.3	2088	4	US-09-551-853D-13	Sequence 13, Appl
13	49.5	40.9	54	2	US-08-691-814B-42	Sequence 42, Appl
14	49.5	40.9	112	4	US-09-252-991A-29976	Sequence 29976, A
15	48.5	40.1	22	1	US-08-599-556-1	Sequence 1, Appli
16	48.5	40.1	22	5	PCT-US96-05262-2	Sequence 2, Appli
17	48.5	40.1	27	5	US-08-599-556-7	Sequence 7, Appli
18	48.5	40.1	27	5	PCT-US96-05262-12	Sequence 12, Appl
19	48.5	40.1	359	3	US-08-586-165-4	Sequence 4, Appli
20	48	39.7	170	2	US-08-460-529B-9	Sequence 9, Appli
21	48	39.7	554	4	US-09-252-991A-28232	Sequence 28232, A
22	47.5	39.3	197	4	US-09-252-991A-30359	Sequence 30359, A
23	47	38.8	45	4	US-08-900-230-46	Sequence 46, Appli
24	47	38.8	45	4	US-08-900-230-53	Sequence 53, Appl
25	47	38.8	46	4	US-08-900-230-40	Sequence 40, Appl
26	47	38.8	199	4	US-09-252-991A-20230	Sequence 20230, A
27	47	38.8	280	4	US-09-252-991A-20783	Sequence 20783, A
28	47	38.8	486	4	US-09-252-991A-30369	Sequence 30369, A
29	47	38.8	908	4	US-08-714-741-44	Sequence 44, Appl
30	47	38.8	1833	4	US-08-479-722B-2	Sequence 2, Appli
31	47	38.8	1833	5	PCT-US95-02251-18	Sequence 18, Appl
32	46.5	38.4	212	4	US-09-252-991A-27887	Sequence 27887, A
33	46.5	38.4	593	1	US-07-668-648-4	Sequence 4, Appli
34	46.5	38.4	593	2	US-08-429-998-4	Sequence 4, Appli
35	46.5	38.4	593	4	US-08-431-333-4	Sequence 4, Appli
36	46.5	38.4	593	5	US-08-991-862-17	Sequence 17, Appl
37	46.5	38.4	593	5	PCT-US91-02321-4	Sequence 4, Appli
38	46.5	38.4	736	4	US-09-252-991A-32256	Sequence 32256, A
39	46.5	38.4	801	1	US-07-906-349A-6	Sequence 6, Appli
40	46	38.0	25	1	US-08-092-215-4	Sequence 4, Appli
41	46	38.0	29	1	US-08-092-215-13	Sequence 13, Appl
42	46	38.0	109	3	US-08-527-044-2	Sequence 2, Appli
43	46	38.0	109	3	US-09-013-780-2	Sequence 2, Appli
44	46	38.0	109	4	US-09-252-991A-22787	Sequence 22787, A
45	46	38.0	120	3	US-08-508-761B-22	Sequence 22, Appl

ALIGNMENTS

RESULT 1
US-08-900-230-3
; Sequence 3, Application US/08900230
; Patent No. 6329197
; GENERAL INFORMATION:
; APPLICANT: Bard, Jonathan A.
; TITLE OF INVENTION: DNA ENCODING GALANN GALR3 RECEPTORS AND
; TITLE OF INVENTION: USES THEREOF
; NUMBER OF SEQUENCES: 59
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cooper & Dunham LLp
; STREET: 1185 Avenue of The Americas
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 11036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/900,230
; FILING DATE: 23-JUL-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 52241-C/JPW/ADM
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-278-0400
; TELEFAX: 212-391-0525
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1417 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE:
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
US-08-900-230-3

Query Match   47.9%; Score 58; DB 4; Length 1417;
Best Local Similarity   50.0%; Pred. No. 36;
Matches   9; Conservative   9; Mismatches   0; Indels   0; Gaps   0;

Qy   3 CCNGGCSSKXCRDHARCC 20
            |||||||||
Db 540 CCTGGCCGTGCCGGCACCC 557

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Matches          8;  Conservative    2;  Mismatches    7;  Indels    7;  Gaps    0;

Qy         4 CNGGCSSKXCRDHARCC 20
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Db        38 CTGGCTACTCGTGAACC 54

RESULT 4
US-08-828-323-23
; Sequence 23, Application US/0882832 3A
; Patent No. 6413753
; GENERAL INFORMATION:
;   APPLICANT: O'Donnell, Michael
;   TITLE OF INVENTION: DNA POLYMERASE III HOLOENZYME
;   FILE REFERENCE: 19603/10214
;   CURRENT APPLICATION NUMBER: US/08/828,323A
;   CURRENT FILING DATE: 1997-03-28
;   NUMBER OF SEQ ID NOS: 60
;   SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 23
;   LENGTH: 58
;   TYPE: PRT
;   ORGANISM: Escherichia coli
US-08-828-323-23

Query Match             44.6%;  Score 54;  DB 4;  Length 58;
Best Local Similarity   47.1%;  Pred. No. 6.9;
Matches          8;  Conservative    2;  Mismatches    7;  Indels    0;  Gaps    0;

Qy         4 CNGGCSSKXCRDHARCC 20
             | |||:|:|  |||
Db        38 CTGGCTACTCGTGAACC 54

RESULT 5
US-09-252-991A-23648
; Sequence 23648, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
;   APPLICANT: Marc J. Rubenfield et al.
;   TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
;   TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
;   FILE REFERENCE: 107196.136
;   CURRENT APPLICATION NUMBER: US/09/252,991A
;   CURRENT FILING DATE: 1999-02-18
;   PRIOR APPLICATION NUMBER: US 60/074,788
;   PRIOR FILING DATE: 1998-02-18
;   PRIOR APPLICATION NUMBER: US 60/094,190
;   PRIOR FILING DATE: 1998-07-27
;   NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 23648
;   LENGTH: 232
;   TYPE: PRT
;   ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-23648

Query Match             44.6%;  Score 54;  DB 4;  Length 232;
Best Local Similarity   47.1%;  Pred. No. 22;
Matches          8;  Conservative    0;  Mismatches    9;  Indels    0;  Gaps    0;

Qy         4 CNGGCSSKXCRDHARCC 20
             | |||:|:| |  ||
Db        63 CTGTCQSSSCSRSGRCC 79

RESULT 6
US-09-003-198A-14
; Sequence 14, Application US/09003198A
; Patent No. 6316407
; GENERAL INFORMATION:
;   APPLICANT: Liang, Jihong
;   APPLICANT: Shah, Dilip Maganlal
;   APPLICANT: Wu, Yonnie S.
```

```
RSULT 2
S-09-738-884-1
; Sequence 1, Application US/09738884
; Patent No. 6391606
; GENERAL INFORMATION:
;   APPLICANT: GUEGLER, Karl et al
;   TITLE OF INVENTION: ISOLATED HUMAN PHOSPHOLIPASE PROTEINS,
;   TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN PHOSPHOLIPASE
;   TITLE OF INVENTION: PROTEINS, AND USES THEREOF
;   FILE REFERENCE: CL000849
;   CURRENT APPLICATION NUMBER: US/09/738,884
;   CURRENT FILING DATE: 2000-12-18
;   NUMBER OF SEQ ID NOS: 5
;   SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1
;   LENGTH: 2211
;   TYPE: PRT
;   ORGANISM: Human
S-09-738-884-1

Query Match             47.1%;  Score 57;  DB 4;  Length 2211;
Best Local Similarity   50.0%;  Pred. No. 67;
Matches          9;  Conservative    1;  Mismatches    8;  Indels    0;  Gaps    0;

Qy         3 CNNGGCSSKXCRDHARCC 20
             || ||||  ||| |
Qy        47 CCCGGCTCCGCAAGATCC 64

SULT 3
-08-279-058B-23
; Sequence 23, Application US/08279058B
; Patent No. 5668004
; GENERAL INFORMATION:
;   APPLICANT: Michael E. O'Donnell
;   TITLE OF INVENTION: DNA POLYMERASE III
;   TITLE OF INVENTION: HOLOENZYME
;   NUMBER OF SEQUENCES: 60
;   CORRESPONDENCE ADDRESS:
;     ADDRESSEE: Yahwak & Associates
;     STREET: 25 Skytop Drive
;     CITY: Trumbull
;     STATE: Connecticut
;     COUNTRY: USA
;     ZIP: 06611
;   COMPUTER READABLE FORM:
;     MEDIUM TYPE: Floppy disk
;     COMPUTER: Macintosh
;     OPERATING SYSTEM: MS-DOS
;     SOFTWARE: Microsoft Word 4.0
;   CURRENT APPLICATION DATA:
;     APPLICATION NUMBER: US/08/279,058B
;     FILING DATE:
;     CLASSIFICATION: 435
;   ATTORNEY/AGENT INFORMATION:
;     NAME: George M. Yahwak
;     REGISTRATION NUMBER: 26,824
;     REFERENCE/DOCKET NUMBER: CRF D-1056CIP
;   TELECOMMUNICATION INFORMATION:
;     TELEPHONE: (203)268-1951
;     TELEFAX: (203)268-1951
; INFORMATION FOR SEQ ID NO: 23:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 58 amino acids
;     TYPE: amino acid
;     TOPOLOGY: linear
;   MOLECULE TYPE: peptide
S-08-279-058B-23

Query Match             44.6%;  Score 54;  DB 1;  Length 58;
Best Local Similarity   47.1%;  Pred. No. 6.9;
```

```
          APPLICANT: Rosenberger, Cindy A.
          APPLICANT: Hakimi, Salim
          TITLE OF INVENTION: Antifungal Polypeptide and Methods for
          TITLE OF INVENTION: Controlling Plant Pathogenic Fungi
          NUMBER OF SEQUENCES: 19
          CORRESPONDENCE ADDRESS:
             ADDRESSEE: Arnold White & Durkee
             STREET: P.O. Box 4433
             CITY: Houston
             STATE: Texas
             COUNTRY: USA
             ZIP: 77210
          COMPUTER READABLE FORM:
             MEDIUM TYPE: Floppy disk
             COMPUTER: IBM PC compatible
             OPERATING SYSTEM: PC-DOS/MS-DOS
             SOFTWARE: PatentIn Release #1.0, Version #1.30
          CURRENT APPLICATION DATA:
             APPLICATION NUMBER: US/09/003,198A
             FILING DATE: 07-JAN-1998
          CLASSIFICATION:
          ATTORNEY/AGENT INFORMATION:
             NAME: Patterson, Melinda L.
             REGISTRATION NUMBER: 33,062
             REFERENCE/DOCKET NUMBER: MOBT:193
          TELECOMMUNICATION INFORMATION:
             TELEPHONE: (713) 787-1400
             TELEFAX: (713) 787-1440
          INFORMATION FOR SEQ ID NO: 14:
          SEQUENCE CHARACTERISTICS:
             LENGTH: 40 amino acids
             TYPE: amino acid
             STRANDEDNESS:
             TOPOLOGY: linear
          09-003-198A-14

          Query Match    43.8%;   Score 53;   DB 4;   Length 40;
          Best Local Similarity  40.7%;   Pred. No. 6.5;
          Matches   11;  Conservative   0;  Mismatches   0;  Indels   6;  Gaps   1;

          Qy    4  CNGGCS--------SKXCRDHARCC 20
                                  ||| |||  ||||
          Db   14  CFGGCDFHCKTKEHLLSGRCRDDFRCC 40

sULT 7
09-003-198A-16
Sequence 16, Application US/09003198A
Patent No. 6316407
GENERAL INFORMATION:
   APPLICANT: Liang, Jihong
   APPLICANT: Shah, Dilip Maganlal
   APPLICANT: Wu, Yonnie S.
   APPLICANT: Rosenberger, Cindy A.
   APPLICANT: Hakimi, Salim
   TITLE OF INVENTION: Antifungal Polypeptide and Methods for
   TITLE OF INVENTION: Controlling Plant Pathogenic Fungi
   NUMBER OF SEQUENCES: 19
   CORRESPONDENCE ADDRESS:
      ADDRESSEE: Arnold White & Durkee
      STREET: P.O. Box 4433
      CITY: Houston
      STATE: Texas
      COUNTRY: USA
      ZIP: 77210
   COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
   CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/09/003,198A
      FILING DATE: 07-JAN-1998
```

```
   CLASSIFICATION:
   ATTORNEY/AGENT INFORMATION:
      NAME: Patterson, Melinda L.
      REGISTRATION NUMBER: 33,062
      REFERENCE/DOCKET NUMBER: MOBT:193
   TELECOMMUNICATION INFORMATION:
      TELEPHONE: (713) 787-1400
      TELEFAX: (713) 787-1440
   INFORMATION FOR SEQ ID NO: 16:
   SEQUENCE CHARACTERISTICS:
      LENGTH: 67 amino acids
      TYPE: amino acid
      STRANDEDNESS:
      TOPOLOGY: linear
   US-09-003-198A-16

   Query Match    43.8%;   Score 53;   DB 4;   Length 67;
   Best Local Similarity  40.7%;   Pred. No. 10;
   Matches   11;  Conservative   0;  Mismatches   0;  Indels   6;  Gaps   1;

   Qy    4  CNGGCS--------SKXCRDHARCC 20
                           ||| |||  ||||
   Db   41  CFGGCDFHCKTKEHLLSGRCRDDFRCC 67

RESULT 8
US-08-977-767-3
Sequence 3, Application US/08977767
Patent No. 5972684
GENERAL INFORMATION:
   APPLICANT: Bandman, Olga
   APPLICANT: Yue, Henry
   APPLICANT: Greenwald, Sara
   APPLICANT: Corley, Neil C.
   TITLE OF INVENTION: CARBONIC ANHYDRASE VIII
   NUMBER OF SEQUENCES: 3
   CORRESPONDENCE ADDRESS:
      ADDRESSEE: Incyte Pharmaceuticals, Inc.
      STREET: 3174 Porter Drive
      CITY: Palo Alto
      STATE: CA
      COUNTRY: USA
      ZIP: 94304
   COMPUTER READABLE FORM:
      MEDIUM TYPE: Diskette
      COMPUTER: IBM Compatible
      OPERATING SYSTEM: DOS
      SOFTWARE: FastSEQ for Windows Version 2.0
   CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/977,767
      FILING DATE: Herewith
      CLASSIFICATION: 424
   PRIOR APPLICATION DATA:
      APPLICATION NUMBER:
      FILING DATE:
   ATTORNEY/AGENT INFORMATION:
      NAME: Billings, Lucy J.
      REGISTRATION NUMBER: 36,749
      REFERENCE/DOCKET NUMBER: PF-0423 US
   TELECOMMUNICATION INFORMATION:
      TELEPHONE: 650-855-0555
      TELEFAX: 650-845-4166
      TELEX:
   INFORMATION FOR SEQ ID NO: 3:
   SEQUENCE CHARACTERISTICS:
      LENGTH: 1345 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
   IMMEDIATE SOURCE:
      LIBRARY: GenBank
      CLONE: 1532042
   US-08-977-767-3
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uery Match   43.4%;   Score 52.5; DB 2;   Length 1345;
est Local Similarity 50.0%; Pred. No. 1.4e+02;
atches   9; Conservative   1; Mismatches   7; Indels   1; Gaps   1;

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      3 CCNGGCSSKXCRDHARCC 20
        ||||||   ||
    774 CCTGGCCATTC-TCAGCC 790
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ULT 9
08-630-915A-37
equence 37, Application US/08630915A
atent No. 6309820
GENERAL INFORMATION:
APPLICANT: SPARKS, Andrew B.
APPLICANT: HOFFMAN, No. 6309820h
APPLICANT: KAY, Brian K.
APPLICANT: FOWLKES, Dana M.
APPLICANT: MCCONNELL, Stephen J.
TITLE OF INVENTION: POLYPEPTIDES HAVING A FUNCTIONAL
TITLE OF INVENTION: DOMAIN OF INTEREST AND METHODS OF IDENTIFYING AND
TITLE OF INVENTION: USING SAME
NUMBER OF SEQUENCES: 227
CORRESPONDENCE ADDRESS:
  ADDRESSEE: Pennie & Edmonds LLP
  STREET: 1155 Avenue of the Americas
  CITY: New York
  STATE: New York
  COUNTRY: USA
  ZIP: 10036-2711
COMPUTER READABLE FORM:
  MEDIUM TYPE: Floppy disk
  COMPUTER: IBM PC compatible
  OPERATING SYSTEM: PC-DOS/MS-DOS
  SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
  APPLICATION NUMBER: US/08/630,915A
  FILING DATE: 03-APR-1996
  CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
  NAME: Misrock, S. Leslie
  REGISTRATION NUMBER: 18,872
  REFERENCE/DOCKET NUMBER: 1101-174
TELECOMMUNICATION INFORMATION:
  TELEPHONE: (212) 790-9090
  TELEFAX: (212) 869-8864/9741
  TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 37:
SEQUENCE CHARACTERISTICS:
  LENGTH: 1400 amino acids
  TYPE: amino acid
  STRANDEDNESS: single
  TOPOLOGY: linear
  MOLECULE TYPE: DNA
08-630-915A-37

Query Match   43.4%;   Score 52.5; DB 4;   Length 1400;
est Local Similarity 50.0%; Pred. No. 1.4e+02;
Matches   9; Conservative   1; Mismatches   5; Indels   3; Gaps   1;

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      3 CCNGGCSSKXCRDHARCC 20
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    190 CCGGGCA---CTGTACCC 204
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SULT 10
-09-548-372D-13
Sequence 13, Application US/09548372D
Patent No. 6420534
GENERAL INFORMATION:
APPLICANT: GURNEY ET AL.
TITLE OF INVENTION: ALZHEIMER'S DISEASE SECRETASE, APP SUBSTRATES THEREFOR AND USES

; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: 29915/62801
; CURRENT APPLICATION NUMBER: US/09/548,372D
; CURRENT FILING DATE: 2000-04-12
; PRIOR APPLICATION NUMBER: US 60/155,493
; PRIOR FILING DATE: 1999-09-23
; PRIOR APPLICATION NUMBER: US 09/404,133
; PRIOR FILING DATE: 1999-09-23
; PRIOR APPLICATION NUMBER: PCT/US99/20881
; PRIOR FILING DATE: 1999-09-23
; PRIOR APPLICATION NUMBER: US 60/101,594
; PRIOR FILING DATE: 1998-09-24
; NUMBER OF SEQ ID NOS: 73
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 13
;   LENGTH: 2088
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-548-372D-13

Query Match   41.3%;   Score 50; DB 4; Length 2088;
Best Local Similarity 44.4%; Pred. No. 3.8e+02;
Matches   8; Conservative   0; Mismatches   10; Indels   0; Gaps   0;

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Qy       3 CCNGGCSSKXCRDHARCC 20
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Db    1617 CCTGGACGATCTCCAGCC 1634
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RESULT 11
US-09-548-367D-13
; Sequence 13, Application US/09548367D
; Patent No. 6440698
; GENERAL INFORMATION:
; APPLICANT: GURNEY ET AL.
; TITLE OF INVENTION: ALZHEIMER'S DISEASE SECRETASE, APP SUBSTRATES THEREFOR AND USES
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: 29915/6280H
; CURRENT APPLICATION NUMBER: US/09/548,367D
; CURRENT FILING DATE: 2000-04-12
; PRIOR APPLICATION NUMBER: US 60/155,493
; PRIOR FILING DATE: 1999-09-23
; PRIOR APPLICATION NUMBER: US 09/404,133
; PRIOR FILING DATE: 1999-09-23
; PRIOR APPLICATION NUMBER: PCT/US99/20881
; PRIOR FILING DATE: 1999-09-23
; PRIOR APPLICATION NUMBER: US 60/101,594
; PRIOR FILING DATE: 1998-09-24
; NUMBER OF SEQ ID NOS: 73
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 13
;   LENGTH: 2088
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-548-367D-13

Query Match   41.3%;   Score 50; DB 4; Length 2088;
Best Local Similarity 44.4%; Pred. No. 3.8e+02;
Matches   8; Conservative   0; Mismatches   10; Indels   0; Gaps   0;

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Qy       3 CCNGGCSSKXCRDHARCC 20
           ||||||      ||
Db    1617 CCTGGACGATCTCCAGCC 1634
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RESULT 12
US-09-551-853D-13
; Sequence 13, Application US/09551853D
; Patent No. 6500667
; GENERAL INFORMATION:
; APPLICANT: GURNEY ET AL.
; TITLE OF INVENTION: ALZHEIMER'S DISEASE SECRETASE, APP SUBSTRATES THEREFOR AND USES
; TITLE OF INVENTION: THEREOF

FILE REFERENCE: 2991S/6280L
CURRENT APPLICATION NUMBER: US/09/551,853D
CURRENT FILING DATE: 2000-04-18
PRIOR APPLICATION NUMBER: US 60/155,493
PRIOR APPLICATION NUMBER: US 09/404,133
PRIOR FILING DATE: 1999-09-23
PRIOR FILING DATE: 1999-09-23
PRIOR APPLICATION NUMBER: PCT/US99/20881
PRIOR FILING DATE: 1999-09-23
PRIOR APPLICATION NUMBER: US 60/101,594
PRIOR FILING DATE: 1998-09-24
NUMBER OF SEQ ID NOS: 73
SOFTWARE: PatentIn version 3.1
SEQ ID NO 13
LENGTH: 2088
TYPE: PRT
ORGANISM: Homo sapiens
-09-551-853D-13

Query Match   41.3%; Score 50; DB 4; Length 2088;
Best Local Similarity 44.4%; Pred. No. 3.8e+02;
Matches   8; Conservative   0; Mismatches 10; Indels   0; Gaps   0;

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Qy     3 CCNGGCSSKXCRDHARCC 20
           ||||| ||
Db  1617 CCTGGACGATCTCCAGCC 1634
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SULT 13
08-691-814B-42
Sequence 42, Application US/08691814B
Patent No. 5981218
GENERAL INFORMATION:
APPLICANT: Rio, Marie-Christine
APPLICANT: Tomasetto, Catherine
APPLICANT: Basset, Paul
APPLICANT: Byrne, Jennifer
TITLE OF INVENTION: Isolated Nucleic Acid Molecules Useful
TITLE OF INVENTION: as Leukemia Markers and in Breast Cancer Prognosis
NUMBER OF SEQUENCES: 124
CORRESPONDENCE ADDRESS:
  ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
  STREET: 1100 New York Ave, NW, Suite 600
  CITY: Washington
  STATE: DC
  COUNTRY: USA
  ZIP: 20005-3934
COMPUTER READABLE FORM:
  MEDIUM TYPE: Floppy disk
  COMPUTER: IBM PC compatible
  OPERATING SYSTEM: PC-DOS/MS-DOS
  SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
  APPLICATION NUMBER: US/08/691,814B
  FILING DATE: 31-JUL-1996
  CLASSIFICATION: 435
PRIOR APPLICATION DATA:
  APPLICATION NUMBER: US 60/002,183
  FILING DATE: 09-AUG-1995
ATTORNEY/AGENT INFORMATION:
  NAME: Steffe, Eric K.
  REGISTRATION NUMBER: 36,688
  REFERENCE/DOCKET NUMBER: 1383.0090001
TELECOMMUNICATION INFORMATION:
  TELEPHONE: 202-371-2600
  TELEFAX: 202-371-2543
INFORMATION FOR SEQ ID NO: 42:
  SEQUENCE CHARACTERISTICS:
  LENGTH: 54 amino acids
  TYPE: amino acid
  STRANDEDNESS: not relevant
  TOPOLOGY: not relevant
  MOLECULE TYPE: peptide

US-08-691-814B-42

Query Match   40.9%; Score 49.5; DB 2; Length 54;
Best Local Similarity 50.0%; Pred. No. 20;
Matches   9; Conservative   1; Mismatches   7; Indels   1; Gaps   1;

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Db    25 CCHGGCISPSIA-HGRLC 41
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RESULT 14
US-09-252-991A-29976
; Sequence 29976, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 29976
; LENGTH: 112
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-29976

Query Match   40.9%; Score 49.5; DB 4; Length 112;
Best Local Similarity 47.4%; Pred. No. 37;
Matches   9; Conservative   2; Mismatches   2; Indels   3; Gaps   2;

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Db    94 NCC---CCARTCR--VRCC 107
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RESULT 15
US-08-599-556-1
; Sequence 1, Application US/08599556
; Patent No. 5670622
; GENERAL INFORMATION:
; APPLICANT: Shon, Ki-Joon
; APPLICANT: Yoshikami, Doju
; APPLICANT: Marsh, Maren
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Hillyard, David R.
; APPLICANT: Olivera, Baldomero M.
; TITLE OF INVENTION: Conotoxin Peptide PIIIA
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
;   ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
;   STREET: 1201 New York Avenue, Suite 1000
;   CITY: Washington
;   STATE: DC
;   COUNTRY: U.S.A.
;   ZIP: 20005-3917
; COMPUTER READABLE FORM:
;   MEDIUM TYPE: Floppy disk
;   COMPUTER: IBM PC compatible
;   OPERATING SYSTEM: PC-DOS/MS-DOS
;   SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/08/599,556
;   FILING DATE:
;   CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
;   NAME: Saxe, Stephen A.

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REGISTRATION NUMBER: 38,609
REFERENCE/DOCKET NUMBER: 24260-107674-03
TELECOMMUNICATION INFORMATION:
    TELEPHONE: 202-962-4848
    TELEFAX: 202-962-8300
INFORMATION FOR SEQ ID NO: 1:
    SEQUENCE CHARACTERISTICS:
        LENGTH: 22 amino acids
        TYPE: amino acid
        STRANDEDNESS: single
        TOPOLOGY: linear
    MOLECULE TYPE: peptide
    HYPOTHETICAL: NO
    ORIGINAL SOURCE:
        ORGANISM: Conus purpurascens
    FEATURE:
        NAME/KEY: Modified-site
        LOCATION: 1
        OTHER INFORMATION: /product= "OTHER"
        OTHER INFORMATION: /note= "Amino acid 1 is pyroglutamate or glutamine."
    FEATURE:
        NAME/KEY: Modified-site
        LOCATION: 8
        OTHER INFORMATION: /product= "OTHER"
        OTHER INFORMATION: /note= "Amino acid 8 is 4-transhydroxyproline or proline."
    FEATURE:
        NAME/KEY: Disulfide-bond
        LOCATION: 4..16
    FEATURE:
        NAME/KEY: Disulfide-bond
        LOCATION: 5..21
    FEATURE:
        NAME/KEY: Disulfide-bond
        LOCATION: 11..22
    FEATURE:
        NAME/KEY: Modified-site
        LOCATION: 18
        OTHER INFORMATION: /product= "OTHER"
        OTHER INFORMATION: /note= "Amino acid 18 is 4-transhydroxyproline or proline."
    FEATURE:
        NAME/KEY: Modified-site
        LOCATION: 22
        OTHER INFORMATION: /product= "OTHER"
        OTHER INFORMATION: /note= "The carboxy terminus may be amidated."
08-599-556-1

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est Local Similarity  45.0%;  Pred. No. 12;
atches   9;  Conservative   2;  Mismatches   6;  Indels   3;  Gaps   2;

  3 CCN--GGCSSKXCRDHARCC 20
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  4 CCGFXKSCRSRQCKXH-RCC 22

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          GenCore version 5.1.6
        Copyright (c) 1993 - 2003  Compugen Ltd.

protein - protein search, using sw model

on:     November 17, 2003, 16:17:08  ; Search time 9.89474 Seconds
                                       (without alignments)
                                       369.003 Million cell updates/sec

le:         US-09-910-009A-211
fect score: 121
quence:     1 XNCCNGGCSSKXCRDHARCC 20

ring table: BLOSUM62
            Gapop 10.0 , Gapext 0.5

rched:      666188 seqs, 182559486 residues

al number of hits satisfying chosen parameters:    666188

imum DB seq length: 0
imum DB seq length: 2000000000

t-processing:  Minimum Match 0%
               Maximum Match 100%
               Listing first 45 summaries

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          2:  /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*
          3:  /cgn2_6/ptodata/2/pubpaa/US05_NEW_PUB.pep:*
          4:  /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*
          5:  /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
          6:  /cgn2_6/ptodata/2/pubpaa/PCTUS_PUBCOMB.pep:*
          7:  /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*
          8:  /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
          9:  /cgn2_6/ptodata/2/pubpaa/US09A_PUBCOMB.pep:*
         10:  /cgn2_6/ptodata/2/pubpaa/US09B_PUBCOMB.pep:*
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         15:  /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep:*
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         17:  /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*
         18:  /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*
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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

ult No.	Score	% Match	Query Length	DB	ID	Description
1	118	97.5	20	11	US-09-910-009A-211	Sequence 211, App
2	117	96.7	20	11	US-09-910-009A-432	Sequence 432, App
3	117	96.7	75	11	US-09-910-009A-210	Sequence 210, App
4	95	78.5	22	11	US-09-910-009A-301	Sequence 301, App
5	94	77.7	22	11	US-09-910-009A-473	Sequence 473, App
6	94	77.7	76	11	US-09-910-009A-300	Sequence 300, App
7	73	60.3	22	11	US-09-910-009A-376	Sequence 376, App
8	72	59.5	22	11	US-09-910-009A-474	Sequence 474, App
9	72	59.5	74	11	US-09-910-009A-375	Sequence 375, App
10	71	58.7	26	11	US-09-910-009A-42	Sequence 42, Appl
11	70.5	58.3	23	11	US-09-910-009A-36	Sequence 36, Appl
12	70	57.9	26	11	US-09-910-009A-495	Sequence 495, App
13	70	57.9	80	11	US-09-910-009A-41	Sequence 41, Appl
14	69.5	57.4	23	11	US-09-910-009A-493	Sequence 493, App
15	69.5	57.4	77	11	US-09-910-009A-35	Sequence 35, Appl

16	66	54.5	24	11	US-09-910-009A-39	Sequence 39, Appl
17	65	53.7	24	11	US-09-910-009A-494	Sequence 494, Appl
18	65	53.7	78	11	US-09-910-009A-38	Sequence 38, Appl
19	64	52.9	1129	12	US-10-140-472-221	Sequence 221, App
20	64	52.9	1129	12	US-10-141-761-221	Sequence 221, App
21	64	52.9	1129	12	US-10-142-885-221	Sequence 221, App
22	64	52.9	1129	12	US-10-158-790-221	Sequence 221, App
23	64	52.9	1129	12	US-10-137-871-221	Sequence 221, App
24	64	52.9	1129	12	US-10-140-805-221	Sequence 221, App
25	64	52.9	1129	12	US-10-140-864-221	Sequence 221, App
26	64	52.9	1129	12	US-10-140-923-221	Sequence 221, App
27	64	52.9	1129	12	US-10-141-756-221	Sequence 221, App
28	64	52.9	1129	12	US-10-141-759-221	Sequence 221, App
29	64	52.9	1129	15	US-10-123-155-221	Sequence 221, App
30	64	52.9	1129	16	US-10-146-731-221	Sequence 221, App
31	63.5	52.5	23	11	US-09-910-009A-33	Sequence 33, Appl
32	63	52.1	2359	15	US-10-184-644-187	Sequence 187, App
33	63	52.1	2359	11	US-10-184-634-187	Sequence 187, App
34	61.5	50.8	23	11	US-09-910-009A-492	Sequence 492, Appl
35	61.5	50.8	77	11	US-09-910-009A-32	Sequence 32, Appl
36	60	49.6	539	15	US-10-184-644-485	Sequence 485, App
37	60	49.6	539	15	US-10-184-634-485	Sequence 485, App
38	60	49.6	1797	15	US-10-184-644-331	Sequence 331, App
39	60	49.6	1797	15	US-10-184-634-331	Sequence 331, App
40	60	49.6	2379	12	US-10-140-472-535	Sequence 535, App
41	60	49.6	2379	12	US-10-141-761-535	Sequence 535, App
42	60	49.6	2379	12	US-10-142-885-535	Sequence 535, App
43	60	49.6	2379	12	US-10-063-685-123	Sequence 123, App
44	60	49.6	2379	12	US-10-158-790-535	Sequence 535, App
45	60	49.6	2379	12	US-10-137-871-535	Sequence 535, App

ALIGNMENTS

RESULT 1
US-09-910-009A-211

; Sequence 211, Application US/09910009A
; Publication No. US20030050234A1
; GENERAL INFORMATION:
;   APPLICANT: University of Utah Research Foundation
;   APPLICANT: Cognetix, Inc.
;   APPLICANT: Olivera, Baldomero M.
;   APPLICANT: McIntosh, J. Michael
;   APPLICANT: Garrett, James E.
;   APPLICANT: Watkins, Maren
;   APPLICANT: Cruz, Lourdes J.
;   APPLICANT: Shon, Ki-Joon
;   APPLICANT: Jacobsen, Richard
;   APPLICANT: Jones, Robert M.
;   APPLICANT: Cartier, G. Edward
;   APPLICANT: Shen, Greg S.
;   APPLICANT: Wagstaff, John D.
;   TITLE OF INVENTION: Mu-Conopeptides
;   FILE REFERENCE: 2314-242
;   CURRENT APPLICATION NUMBER: US/09/910,009A
;   CURRENT FILING DATE: 2001-07-23
;   PRIOR APPLICATION NUMBER: US 60/219,619
;   PRIOR FILING DATE: 2000-07-21
;   PRIOR APPLICATION NUMBER: US 60/245,157
;   PRIOR FILING DATE: 2000-11-03
;   PRIOR APPLICATION NUMBER: US 60/264,319
;   PRIOR FILING DATE: 2001-01-29
;   PRIOR APPLICATION NUMBER: US 60/277,270
;   PRIOR FILING DATE: 2001-03-21
;   NUMBER OF SEQ ID NOS: 520
;   SOFTWARE: PatentIn version 3.0
;   SEQ ID NO 211
;   LENGTH: 20
;   TYPE: PRT
;   ORGANISM: Conus striatus
;   FEATURE:
;   NAME/KEY: PEPTIDE

LOCATION: (1)..(20)
OTHER INFORMATION: Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 12 is Trp or
OTHER INFORMATION: bromo-Trp
09-910-009A-211

Query Match   97.5%;   Score 118; DB 11;   Length 20;
Best Local Similarity 100.0%; Pred. No. 7.4e-08;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 NCCNGGCSSKXCRDHARCC 20
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Db 2 NCCNGGCSSKXCRDHARCC 20

RESULT 2
09-910-009A-432
; Sequence 432, Application US/09910009A
; Publication No. US20030050234A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Garrett, James E.
; APPLICANT: Watkins, Maren
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Shon, Ki-Joon
; APPLICANT: Jacobsen, Richard
; APPLICANT: Jones, Robert M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Shen, Greg S.
; APPLICANT: Wagstaff, John D.
; TITLE OF INVENTION: Mu-Conopeptides
; FILE REFERENCE: 2314-242
; CURRENT APPLICATION NUMBER: US/09/910,009A
; CURRENT FILING DATE: 2000-07-23
; PRIOR APPLICATION NUMBER: US 60/219,619
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: US 60/245,157
; PRIOR FILING DATE: 2000-11-03
; PRIOR APPLICATION NUMBER: US 60/264,319
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: US 60/277,270
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 520
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 432
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Conus striatus
09-910-009A-432

Query Match   96.7%;   Score 117; DB 11;   Length 20;
Best Local Similarity 94.7%; Pred. No. 9.8e-08;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 NCCNGGCSSKXCRDHARCC 20
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Db 2 NCCNGGCSSKWCRDHARCC 20

RESULT 3
09-910-009A-210
; Sequence 210, Application US/09910009A
; Publication No. US20030050234A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Garrett, James E.
; APPLICANT: Watkins, Maren
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Shon, Ki-Joon
; APPLICANT: Jacobsen, Richard
; APPLICANT: Jones, Robert M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Shen, Greg S.
; APPLICANT: Wagstaff, John D.
; TITLE OF INVENTION: Mu-Conopeptides
; FILE REFERENCE: 2314-242
; CURRENT APPLICATION NUMBER: US/09/910,009A
; CURRENT FILING DATE: 2001-07-23
; PRIOR APPLICATION NUMBER: US 60/219,619
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: US 60/245,157
; PRIOR FILING DATE: 2000-11-03
; PRIOR APPLICATION NUMBER: US 60/264,319
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: US 60/277,270
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 520
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 210
; LENGTH: 75
; TYPE: PRT
; ORGANISM: Conus striatus
US-09-910-009A-210

Query Match   96.7%;   Score 117; DB 11;   Length 75;
Best Local Similarity 94.7%; Pred. No. 2.9e-07;
Matches 18; Conservative 0; Mismatches 1; Indels 1; Gaps 0;

Qy 2 NCCNGGCSSKXCRDHARCC 20
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Db 55 NCCNGGCSSKWCRDHARCC 73

RESULT 4
US-09-910-009A-301
; Sequence 301, Application US/09910009A
; Publication No. US20030050234A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Garrett, James E.
; APPLICANT: Watkins, Maren
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Shon, Ki-Joon
; APPLICANT: Jacobsen, Richard
; APPLICANT: Jones, Robert M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Shen, Greg S.
; APPLICANT: Wagstaff, John D.
; TITLE OF INVENTION: Mu-Conopeptides
; FILE REFERENCE: 2314-242
; CURRENT APPLICATION NUMBER: US/09/910,009A
; CURRENT FILING DATE: 2001-07-23
; PRIOR APPLICATION NUMBER: US 60/219,619
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: US 60/245,157
; PRIOR FILING DATE: 2000-11-03
; PRIOR APPLICATION NUMBER: US 60/264,319
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: US 60/277,270
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 520
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 301
; LENGTH: 22
; TYPE: PRT
; ORGANISM: Conus stercusmuscarum
; FEATURE:
; NAME/KEY: PEPTIDE

LOCATION: (1)..(22)
OTHER INFORMATION: Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 14 is Trp or
OTHER INFORMATION: bromo-Trp
S-09-910-009A-301

Query Match   78.5%;   Score 95; DB 11; Pred. No. 4.4e-05; Length 22;
Best Local Similarity   80.0%;
Matches 16; Conservative 2; Mismatches 0; Indels 2; Gaps 1;

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b    3 CCNGRRGCSSRXCRDHSRCC 22
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ESULT 5
S-09-910-009A-473
Sequence 473, Application US/09910009A
Publication No. US2003050234A1
GENERAL INFORMATION:
APPLICANT: University of Utah Research Foundation
APPLICANT: Cognetix, Inc.
APPLICANT: Olivera, Baldomero M.
APPLICANT: McIntosh, J. Michael
APPLICANT: Garrett, James E.
APPLICANT: Watkins, Maren
APPLICANT: Cruz, Lourdes J.
APPLICANT: Shon, Ki-Joon
APPLICANT: Jacobsen, Richard
APPLICANT: Jones, Robert M.
APPLICANT: Cartier, G. Edward
APPLICANT: Shen, Greg S.
APPLICANT: Wagstaff, John D.
TITLE OF INVENTION: Mu-Conopeptides
FILE REFERENCE: 2314-242
CURRENT APPLICATION NUMBER: US/09/910,009A
CURRENT FILING DATE: 2001-07-23
PRIOR APPLICATION NUMBER: US 60/219,619
PRIOR FILING DATE: 2000-07-21
PRIOR APPLICATION NUMBER: US 60/245,157
PRIOR FILING DATE: 2000-11-03
PRIOR APPLICATION NUMBER: US 60/264,319
PRIOR FILING DATE: 2001-01-29
PRIOR APPLICATION NUMBER: US 60/277,270
PRIOR FILING DATE: 2001-03-21
NUMBER OF SEQ ID NOS: 520
SOFTWARE: PatentIn version 3.0
SEQ ID NO 473
LENGTH: 22
TYPE: PRT
ORGANISM: Conus stercusmuscarum
S-09-910-009A-473

Query Match   77.7%;   Score 94; DB 11; Pred. No. 5.8e-05; Length 22;
Best Local Similarity   75.0%;
Matches 15; Conservative 2; Mismatches 2; Indels 1; Gaps 1;

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y    3 CCNG--GCSSKXCRDHARCC 20
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b    3 CCNGRRGCSSRWCRDHSRCC 22
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ESULT 6
S-09-910-009A-300
Sequence 300, Application US/09910009A
Publication No. US2003050234A1
GENERAL INFORMATION:
APPLICANT: University of Utah Research Foundation
APPLICANT: Cognetix, Inc.
APPLICANT: Olivera, Baldomero M.
APPLICANT: McIntosh, J. Michael
APPLICANT: Garrett, James E.
APPLICANT: Watkins, Maren
APPLICANT: Cruz, Lourdes J.
APPLICANT: Shon, Ki-Joon
APPLICANT: Jacobsen, Richard
APPLICANT: Jones, Robert M.
APPLICANT: Cartier, G. Edward
APPLICANT: Shen, Greg S.
APPLICANT: Wagstaff, John D.
TITLE OF INVENTION: Mu-Conopeptides
FILE REFERENCE: 2314-242
CURRENT APPLICATION NUMBER: US/09/910,009A
CURRENT FILING DATE: 2001-07-23
PRIOR APPLICATION NUMBER: US 60/219,619
PRIOR FILING DATE: 2000-07-21
PRIOR APPLICATION NUMBER: US 60/245,157
PRIOR FILING DATE: 2000-11-03
PRIOR APPLICATION NUMBER: US 60/264,319
PRIOR FILING DATE: 2001-01-29
PRIOR APPLICATION NUMBER: US 60/277,270
PRIOR FILING DATE: 2001-03-21
NUMBER OF SEQ ID NOS: 520
SOFTWARE: PatentIn version 3.0
SEQ ID NO 300
LENGTH: 76
TYPE: PRT
ORGANISM: Conus stercusmuscarum
US-09-910-009A-300

Query Match   77.7%;   Score 94; DB 11; Pred. No. 0.00016; Length 76;
Best Local Similarity   75.0%;
Matches 15; Conservative 2; Mismatches 2; Indels 1; Gaps 1;

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Qy    3 CCNG--GCSSKXCRDHARCC 20
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Db   54 CCNGRRGCSSRWCRDHSRCC 73
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RESULT 7
US-09-910-009A-376
Sequence 376, Application US/09910009A
Publication No.US20030050234A1
GENERAL INFORMATION:
APPLICANT: University of Utah Research Foundation
APPLICANT: Cognetix, Inc.
APPLICANT: Olivera, Baldomero M.
APPLICANT: McIntosh, J. Michael
APPLICANT: Garrett, James E.
APPLICANT: Watkins, Maren
APPLICANT: Cruz, Lourdes J.
APPLICANT: Shon, Ki-Joon
APPLICANT: Jacobsen, Richard
APPLICANT: Jones, Robert M.
APPLICANT: Cartier, G. Edward
APPLICANT: Shen, Greg S.
APPLICANT: Wagstaff, John D.
TITLE OF INVENTION: Mu-Conopeptides
FILE REFERENCE: 2314-242
CURRENT APPLICATION NUMBER: US/09/910,009A
CURRENT FILING DATE: 2001-07-23
PRIOR APPLICATION NUMBER: US 60/219,619
PRIOR FILING DATE: 2000-07-21
PRIOR APPLICATION NUMBER: US 60/245,157
PRIOR FILING DATE: 2000-11-03
PRIOR APPLICATION NUMBER: US 60/264,319
PRIOR FILING DATE: 2001-01-29
PRIOR APPLICATION NUMBER: US 60/277,270
PRIOR FILING DATE: 2001-03-21
NUMBER OF SEQ ID NOS: 520
SOFTWARE: PatentIn version 3.0
SEQ ID NO 376
LENGTH: 22
TYPE: PRT
ORGANISM: Conus consors
FEATURE:
NAME/KEY: PEPTIDE

LOCATION: (1)..(22)
OTHER INFORMATION: Xaa at residue 7 is Pro or Hyp; Xaa at residue 14 is Trp or bromo
OTHER INFORMATION: -Trp
-09-910-009A-376

Query Match   60.3%;   Score 73; DB 11; Length 22;
Best Local Similarity   60.0%;   Pred. No. 0.018;
Matches   12; Conservative   3; Mismatches   3; Indels   2; Gaps   1;

              3 CCN--GGCSSKXCRDHARCC 20
                ||: .:||||||::||
              3 CCDVXNACSGRXCRDHAQCC 22

SULT 8
-09-910-009A-474
Sequence 474, Application US/09910009A
Publication No. US20030050234A1
GENERAL INFORMATION:
APPLICANT: University of Utah Research Foundation
APPLICANT: Cognetix, Inc.
APPLICANT: Olivera, Baldomero M.
APPLICANT: McIntosh, J. Michael
APPLICANT: Garrett, James E.
APPLICANT: Watkins, Maren
APPLICANT: Cruz, Lourdes J.
APPLICANT: Shon, Ki-Joon
APPLICANT: Jacobsen, Richard
APPLICANT: Jones, Robert M.
APPLICANT: Cartier, G. Edward
APPLICANT: Shen, Greg S.
APPLICANT: Wagstaff, John D.
TITLE OF INVENTION: Mu-Conopeptides
FILE REFERENCE: 2314-242
CURRENT APPLICATION NUMBER: US/09/910,009A
CURRENT FILING DATE: 2001-07-23
PRIOR APPLICATION NUMBER: US 60/219,619
PRIOR FILING DATE: 2000-07-21
PRIOR APPLICATION NUMBER: US 60/245,157
PRIOR FILING DATE: 2000-11-03
PRIOR APPLICATION NUMBER: US 60/264,319
PRIOR FILING DATE: 2001-01-29
PRIOR APPLICATION NUMBER: US 60/277,270
PRIOR FILING DATE: 2001-03-21
NUMBER OF SEQ ID NOS: 520
SOFTWARE: PatentIn version 3.0
SEQ ID NO 474
LENGTH: 22
TYPE: PRT
ORGANISM: Conus consors
-09-910-009A-474

Query Match   59.5%;   Score 72; DB 11; Length 22;
Best Local Similarity   55.0%;   Pred. No. 0.024;
Matches   11; Conservative   3; Mismatches   3; Indels   4; Gaps   1;

              3 CCN--GGCSSKXCRDHARCC 20
                || .:||||||::||
              3 CCDVPNACSGRWCRDHAQCC 22

ESULT 9
S-09-910-009A-375
Sequence 375, Application US/09910009A
Publication No. US20030050234A1
GENERAL INFORMATION:
APPLICANT: University of Utah Research Foundation
APPLICANT: Cognetix, Inc.
APPLICANT: Olivera, Baldomero M.
APPLICANT: McIntosh, J. Michael
APPLICANT: Garrett, James E.
APPLICANT: Watkins, Maren
APPLICANT: Cruz, Lourdes J.

, APPLICANT: Shon, Ki-Joon
, APPLICANT: Jacobsen, Richard
, APPLICANT: Jones, Robert M.
, APPLICANT: Cartier, G. Edward
, APPLICANT: Shen, Greg S.
, APPLICANT: Wagstaff, John D.
, TITLE OF INVENTION: Mu-Conopeptides
, FILE REFERENCE: 2314-242
, CURRENT APPLICATION NUMBER: US/09/910,009A
, CURRENT FILING DATE: 2001-07-23
, PRIOR APPLICATION NUMBER: US 60/219,619
, PRIOR FILING DATE: 2000-07-21
, PRIOR APPLICATION NUMBER: US 60/245,157
, PRIOR FILING DATE: 2000-11-03
, PRIOR APPLICATION NUMBER: US 60/264,319
, PRIOR FILING DATE: 2001-01-29
, PRIOR APPLICATION NUMBER: US 60/277,270
, PRIOR FILING DATE: 2001-03-21
, NUMBER OF SEQ ID NOS: 520
, SOFTWARE: PatentIn version 3.0
; SEQ ID NO 375
; LENGTH: 74
; TYPE: PRT
; ORGANISM: Conus consors
US-09-910-009A-375

Query Match   59.5%;   Score 72; DB 11; Length 74;
Best Local Similarity   55.0%;   Pred. No. 0.066;
Matches   11; Conservative   3; Mismatches   4; Indels   2; Gaps   1;

Qy   3 CCN--GGCSSKXCRDHARCC 20
                ||: .:||||||::||
Db   54 CCDVPNACSGRWCRDHAQCC 73

RESULT 10
US-09-910-009A-42
; Sequence 42, Application US/09910009A
; Publication No. US20030050234A1
; GENERAL INFORMATION:
APPLICANT: University of Utah Research Foundation
, APPLICANT: Cognetix, Inc.
, APPLICANT: Olivera, Baldomero M.
, APPLICANT: McIntosh, J. Michael
, APPLICANT: Garrett, James E.
, APPLICANT: Watkins, Maren
, APPLICANT: Cruz, Lourdes J.
, APPLICANT: Shon, Ki-Joon
, APPLICANT: Jacobsen, Richard
, APPLICANT: Jones, Robert M.
, APPLICANT: Cartier, G. Edward
, APPLICANT: Shen, Greg S.
, APPLICANT: Wagstaff, John D.
, TITLE OF INVENTION: Mu-Conopeptides
, FILE REFERENCE: 2314-242
, CURRENT APPLICATION NUMBER: US/09/910,009A
, CURRENT FILING DATE: 2001-07-23
, PRIOR APPLICATION NUMBER: US 60/219,619
, PRIOR FILING DATE: 2000-07-21
, PRIOR APPLICATION NUMBER: US 60/245,157
, PRIOR FILING DATE: 2000-11-03
, PRIOR APPLICATION NUMBER: US 60/264,319
, PRIOR FILING DATE: 2001-01-29
, PRIOR APPLICATION NUMBER: US 60/277,270
, PRIOR FILING DATE: 2001-03-21
, NUMBER OF SEQ ID NOS: 520
, SOFTWARE: PatentIn version 3.0
; SEQ ID NO 42
; LENGTH: 26
; TYPE: PRT
; ORGANISM: Conus bullatus
; FEATURE:
; NAME/KEY: PEPTIDE

LOCATION: (1)..(26)
OTHER INFORMATION: Xaa at residue 18 is Trp or bromo-Trp
09-910-009A-42

uery Match   58.7%;   Score 71;   DB 11;   Length 26;
est Local Similarity   60.9%;   Pred. No. 0.037;
atches 14;   Conservative 2;   Mismatches 1;   Indels 6;   Gaps 2;

```
     3 CCN-----GGCSSKXCRDHARCC 20
       ||| |||:|||||:|||
     5 CCNKGNGKRGC-SRXCRDHSRCC 26
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ULT 11
09-910-009A-36
equence 36, Application US/09910009A
ublication No. US2003005234A1
ENERAL INFORMATION:
APPLICANT: University of Utah Research Foundation
APPLICANT: Cognetix, Inc.
APPLICANT: Olivera, Baldomero M.
APPLICANT: McIntosh, J. Michael
APPLICANT: Garrett, James E.
APPLICANT: Watkins, Maren
APPLICANT: Cruz, Lourdes J.
APPLICANT: Shon, Ki-Joon
APPLICANT: Jacobsen, Richard
APPLICANT: Jones, Robert M.
APPLICANT: Cartier, G. Edward
APPLICANT: Shen, Greg S.
APPLICANT: Wagstaff, John D.
TITLE OF INVENTION: Mu-Conopeptides
FILE REFERENCE: 2314-242
CURRENT APPLICATION NUMBER: US/09/910,009A
CURRENT FILING DATE: 2001-07-23
PRIOR APPLICATION NUMBER: US 60/219,619
PRIOR FILING DATE: 2000-07-21
PRIOR APPLICATION NUMBER: US 60/245,157
PRIOR FILING DATE: 2000-11-03
PRIOR APPLICATION NUMBER: US 60/264,319
PRIOR FILING DATE: 2001-01-29
PRIOR APPLICATION NUMBER: US 60/277,270
PRIOR FILING DATE: 2001-03-21
NUMBER OF SEQ ID NOS: 520
SOFTWARE: PatentIn version 3.0
EQ ID NO 36
LENGTH: 23
TYPE: PRT
ORGANISM: Conus bullatus
FEATURE:
NAME/KEY: PEPTIDE
LOCATION: (1)..(23)
OTHER INFORMATION: Xaa at residue 15 is Trp or bromo-Trp
09-910-009A-36

uery Match   58.3%;   Score 70.5;   DB 11;   Length 23;
est Local Similarity   65.0%;   Pred. No. 0.038;
atches 13;   Conservative 2;   Mismatches 2;   Indels 3;   Gaps 2;

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     3 CCNG--GCSSKXCRDHARCC 20
       |||-||-|||||:|||||
     5 CCKGKRGC-GRXCRDHSRCC 23
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ULT 12
09-910-009A-495
equence 495, Application US/09910009A
ublication No. US2003005234A1
ENERAL INFORMATION:
APPLICANT: University of Utah Research Foundation
APPLICANT: Cognetix, Inc.
APPLICANT: Olivera, Baldomero M.
APPLICANT: McIntosh, J. Michael

APPLICANT: Garrett, James E.
APPLICANT: Watkins, Maren
APPLICANT: Cruz, Lourdes J.
APPLICANT: Shon, Ki-Joon
APPLICANT: Jacobsen, Richard
APPLICANT: Jones, Robert M.
APPLICANT: Cartier, G. Edward
APPLICANT: Shen, Greg S.
APPLICANT: Wagstaff, John D.
TITLE OF INVENTION: Mu-Conopeptides
FILE REFERENCE: 2314-242
CURRENT APPLICATION NUMBER: US/09/910,009A
CURRENT FILING DATE: 2001-07-23
PRIOR APPLICATION NUMBER: US 60/219,619
PRIOR FILING DATE: 2000-07-21
PRIOR APPLICATION NUMBER: US 60/245,157
PRIOR FILING DATE: 2000-11-03
PRIOR APPLICATION NUMBER: US 60/264,319
PRIOR FILING DATE: 2001-01-29
PRIOR APPLICATION NUMBER: US 60/277,270
PRIOR FILING DATE: 2001-03-21
NUMBER OF SEQ ID NOS: 520
SOFTWARE: PatentIn version 3.0
SEQ ID NO 495
LENGTH: 26
TYPE: PRT
ORGANISM: Conus bullatus
US-09-910-009A-495

Query Match   57.9%;   Score 70;   DB 11;   Length 26;
Best Local Similarity   56.5%;   Pred. No. 0.048;
Matches 13;   Conservative 2;   Mismatches 2;   Indels 6;   Gaps 2;

```
Qy    3 CCN-----GGCSSKXCRDHARCC 20
          ||| |-:|||||:|||
Db    5 CCNKGNGKRGC-SRXCRDHSRCC 26
```

RESULT 13
US-09-910-009A-41
; Sequence 41, Application US/09910009A
; Publication No. US2003005234A1
; GENERAL INFORMATION:
APPLICANT: University of Utah Research Foundation
APPLICANT: Cognetix, Inc.
APPLICANT: Olivera, Baldomero M.
APPLICANT: McIntosh, J. Michael
APPLICANT: Garrett, James E.
APPLICANT: Watkins, Maren
APPLICANT: Cruz, Lourdes J.
APPLICANT: Shon, Ki-Joon
APPLICANT: Jacobsen, Richard
APPLICANT: Jones, Robert M.
APPLICANT: Cartier, G. Edward
APPLICANT: Shen, Greg S.
APPLICANT: Wagstaff, John D.
TITLE OF INVENTION: Mu-Conopeptides
FILE REFERENCE: 2314-242
CURRENT APPLICATION NUMBER: US/09/910,009A
CURRENT FILING DATE: 2001-07-23
PRIOR APPLICATION NUMBER: US 60/219,619
PRIOR FILING DATE: 2000-07-21
PRIOR APPLICATION NUMBER: US 60/245,157
PRIOR FILING DATE: 2000-11-03
PRIOR APPLICATION NUMBER: US 60/264,319
PRIOR FILING DATE: 2001-01-29
PRIOR APPLICATION NUMBER: US 60/277,270
PRIOR FILING DATE: 2001-03-21
NUMBER OF SEQ ID NOS: 520
SOFTWARE: PatentIn version 3.0
SEQ ID NO 41
LENGTH: 80
TYPE: PRT

ORGANISM: Conus bullatus
9-910-009A-41

uery Match   57.9%;   Score 70; DB 11; Length 80;
est Local Similarity 56.5%;   Pred. No. 0.12;
atches   13; Conservative   2; Mismatches   2; Indels   6; Gaps   2;

Qy   3 CCN-----GGCSSKXCRDHARCC 20
        ||| |: |||||:|||
Db   56 CCNKGNGKRGC-SRWCRDHSRCC 77

ULT 14
9-910-009A-493
quence 493, Application US/09910009A
ublication No. US20030050234A1
ENERAL INFORMATION:
APPLICANT: University of Utah Research Foundation
APPLICANT: Cognetix, Inc.
APPLICANT: Olivera, Baldomero M.
APPLICANT: McIntosh, J. Michael
APPLICANT: Garrett, James E.
APPLICANT: Watkins, Maren
APPLICANT: Cruz, Lourdes J.
APPLICANT: Shon, Ki-Joon
APPLICANT: Jacobsen, Richard
APPLICANT: Jones, Robert M.
APPLICANT: Cartier, G. Edward
APPLICANT: Shen, Greg S.
APPLICANT: Wagstaff, John D.
TITLE OF INVENTION: Mu-Conopeptides
FILE REFERENCE: 2314-242
CURRENT APPLICATION NUMBER: US/09/910,009A
CURRENT FILING DATE: 2001-07-23
PRIOR APPLICATION NUMBER: US 60/219,619
PRIOR FILING DATE: 2000-07-21
PRIOR APPLICATION NUMBER: US 60/245,157
PRIOR FILING DATE: 2000-11-03
PRIOR APPLICATION NUMBER: US 60/264,319
PRIOR FILING DATE: 2001-01-29
PRIOR APPLICATION NUMBER: US 60/277,270
PRIOR FILING DATE: 2001-03-21
NUMBER OF SEQ ID NOS: 520
SOFTWARE: PatentIn version 3.0
EQ ID NO 493
LENGTH: 23
TYPE: PRT
ORGANISM: Conus bullatus
09-910-009A-493

uery Match   57.4%;   Score 69.5; DB 11; Length 23;
est Local Similarity 60.0%;   Pred. No. 0.05;
atches   12; Conservative   2; Mismatches   2; Indels   3; Gaps   2;

Qy   3 CCNG--GCSSKXCRDHARCC 20
        |||-|| : ||||:|||
Db   5 CCKGKRGC-GRWCRDHSRCC 23

ULT 15
09-910-009A-35
equence 35, Application US/09910009A
ublication No. US20030050234A1
ENERAL INFORMATION:
APPLICANT: University of Utah Research Foundation
APPLICANT: Cognetix, Inc.
APPLICANT: Olivera, Baldomero M.
APPLICANT: McIntosh, J. Michael
APPLICANT: Garrett, James E.
APPLICANT: Watkins, Maren
APPLICANT: Cruz, Lourdes J.
APPLICANT: Shon, Ki-Joon
APPLICANT: Jacobsen, Richard

APPLICANT: Jones, Robert M.
APPLICANT: Cartier, G. Edward
APPLICANT: Shen, Greg S.
APPLICANT: Wagstaff, John D.
TITLE OF INVENTION: Mu-Conopeptides
FILE REFERENCE: 2314-242
CURRENT APPLICATION NUMBER: US/09/910,009A
CURRENT FILING DATE: 2001-07-23
PRIOR APPLICATION NUMBER: US 60/219,619
PRIOR FILING DATE: 2000-07-21
PRIOR APPLICATION NUMBER: US 60/245,157
PRIOR FILING DATE: 2000-11-03
PRIOR APPLICATION NUMBER: US 60/264,319
PRIOR FILING DATE: 2001-01-29
PRIOR APPLICATION NUMBER: US 60/277,270
PRIOR FILING DATE: 2001-03-21
NUMBER OF SEQ ID NOS: 520
SOFTWARE: PatentIn version 3.0
SEQ ID NO 35
LENGTH: 77
TYPE: PRT
ORGANISM: Conus bullatus
US-09-910-009A-35

Query Match   57.4%;   Score 69.5; DB 11; Length 77;
Best Local Similarity 60.0%;   Pred. No. 0.14;
Matches   12; Conservative   2; Mismatches   3; Indels   3; Gaps   2;

Qy   3 CCNG--GCSSKXCRDHARCC 20
        |||-|| : ||||:|||
Db   56 CCKGKRGC-GRWCRDHSRCC 74

Search completed: November 17, 2003, 16:26:50
Job time : 9.89474 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: November 17, 2003, 16:04:42 ; Search time 22.1053 Seconds
                                       (without alignments)
                                       143.555 Million cell updates/sec

Title: US-09-910-009A-210
Perfect score: 420
Sequence: 1 GSMMSKLGVLJTVCLLJFPL..........CCNGGCSSKWCRDHARCCGR 75

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 328717 seqs, 42310858 residues

Total number of hits satisfying chosen parameters: 328717

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Database :   Issued Patents_AA:*
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    2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
    3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
    4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
    5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
    6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*

   Pred. No. is the number of results predicted by chance to have a
   score greater than or equal to the score of the result being printed,
   and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	223.5	53.2	68	1	US-07-689-693B-11	Sequence 11, Appl
2	191	45.5	52	1	US-07-689-693B-24	Sequence 24, Appl
3	73	17.4	333	2	US-08-700-442A-9	Sequence 9, Appli
4	73	17.4	333	1	US-08-831-028-9	Sequence 9, Appli
5	72.5	17.3	64	1	US-08-137-800-37	Sequence 37, Appl
6	72.5	17.3	64	1	US-08-137-800-39	Sequence 39, Appl
7	72.5	17.3	64	1	US-08-477-383-37	Sequence 37, Appl
8	72.5	17.3	64	1	US-08-477-383-39	Sequence 39, Appl
9	72.5	17.3	64	1	US-08-487-174-37	Sequence 37, Appl
10	72.5	17.3	64	1	US-08-487-174-39	Sequence 39, Appl
11	72.5	17.3	64	1	US-08-480-750-37	Sequence 37, Appl
12	72.5	17.3	64	1	US-08-480-750-39	Sequence 39, Appl
13	72.5	17.3	3025	6	5223423-3	Patent No. 5223423
14	71.5	17.0	59	3	US-09-488-799-31	Sequence 31, Appl
15	71.5	17.0	63	3	US-09-061-026-22	Sequence 22, Appl
16	71.5	17.0	63	3	US-09-466-138-22	Sequence 22, Appl
17	70.5	16.8	63	3	US-09-061-026-14	Sequence 14, Appl
18	70.5	16.8	63	3	US-09-466-138-14	Sequence 14, Appl
19	70	16.7	27	1	US-08-599-556-7	Sequence 7, Appli
20	69.5	16.5	171	4	US-09-252-991A-31498	Sequence 31498, A
21	68.5	16.3	63	3	US-09-061-026-16	Sequence 16, Appl
22	68.5	16.3	63	3	US-09-466-138-16	Sequence 16, Appl
23	65.5	15.6	59	3	US-09-488-799-33	Sequence 33, Appl
24	65.5	15.6	59	3	US-09-488-799-37	Sequence 37, Appl
25	65.5	15.6	64	1	US-07-689-693B-13	Sequence 13, Appli
26	65.5	15.6	206	1	US-08-178-708-3	Sequence 3, Appli
27	65.5	15.6	206	1	US-08-457-552-3	Sequence 3, Appli
28	65.5	15.6	206	1	US-08-456-430-3	Sequence 3, Appli
29	65.5	15.6	206	2	US-08-994-418-3	Sequence 3, Appli
30	65.5	15.6	206	5	PCT-US95-00432-3	Sequence 3, Appli
31	65	15.5	27	5	PCT-US96-05262-12	Sequence 12, Appl
32	64	15.2	477	4	US-09-328-352-6549	Sequence 6549, Ap
33	63.5	15.1	64	1	US-08-137-800-36	Sequence 36, Appl
34	63.5	15.1	64	1	US-08-137-800-45	Sequence 45, Appl
35	63.5	15.1	64	1	US-08-477-383-36	Sequence 36, Appl
36	63.5	15.1	64	1	US-08-477-383-45	Sequence 45, Appl
37	63.5	15.1	64	1	US-08-487-174-36	Sequence 36, Appl
38	63.5	15.1	64	1	US-08-487-174-45	Sequence 45, Appl
39	63.5	15.1	64	1	US-08-480-750-36	Sequence 36, Appl
40	63.5	15.1	64	1	US-08-480-750-45	Sequence 45, Appl
41	63.5	15.1	174	4	US-09-724-864-56	Sequence 56, Appl
42	63	15.0	60	3	US-09-488-799-49	Sequence 49, Appl
43	63	15.0	60	3	US-09-488-799-51	Sequence 51, Appl
44	63	15.0	1417	4	US-08-900-230-3	Sequence 3, Appli
45	62.5	14.9	59	3	US-09-488-799-29	Sequence 29, Appl

ALIGNMENTS

RESULT 1
US-07-689-693B-11

; Sequence 11, Application US/07689693B
; Patent No. 5231011
GENERAL INFORMATION:
; APPLICANT: David Hillyard
; APPLICANT: Baldomero M. Olivera
; TITLE OF INVENTION: Segregated Folding Determinants
; TITLE OF INVENTION: for Small Disulfide-Rich Peptides
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Thorpe, No. 523101ith & Western
; STREET: 9035 South 700 East, Suite 200
; CITY: Sandy
; STATE: Utah
; COUNTRY: USA
; ZIP: 84070
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.5 inch, 720 Kb storage
; COMPUTER: Compaq LTE/286
; OPERATING SYSTEM: DOS 4.01
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/689,693B
; FILING DATE: 19910418
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: none
; FILING DATE: na
; ATTORNEY/AGENT INFORMATION:
; NAME: Western, M. Wayne
; REGISTRATION NUMBER: 22,788
; REFERENCE/DOCKET NUMBER: 9925
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (801) 566-6633
; TELEFAX: (801) 566-0750
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 68 amino acids
; TYPE: AMINO ACID
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Preprepeptide sequence for three loop
; NAME/KEY: conotoxin from Circler conotoxin from Conus
; NAME/KEY: textile
; IDENTIFICATION METHOD: Libraries were created
; IDENTIFICATION METHOD: using oligo-dT primed pUC13 vector
US-07-689-693B-11

```
Query Match        53.2%;   Score 223.5;  DB 1;  Length 68;
Best Local Similarity  56.6%;  Pred. No. 8.7e-18;
Matches  43;  Conservative  9;  Mismatches  11;  Indels  13;  Gaps  2;

Qy    4 MSKLGVLLTVCLLLFPLTALPLDGDQPADRPAERMQDDISSDEHPLFDKRQNC-----CN 58
        |||||:|||:|||||||||||:|||:||:||:|::|:|||||:||:||    ||
Db    1 MSKLGALLTICLLLFSLTAVPLDGDQHADQPAQRLQDRIPTEDHPLFDPNKRKCCPPVACN 60

Qy   59 GGCSSKWCRDHARCCG 74
        || ||||
Db   61 MGCKP-------CCG 68

RESULT 2
US-07-689-693B-24
; Sequence 24, Application US/07689693B
; Patent No. 5231011
; GENERAL INFORMATION:
,"     APPLICANT:  David Hillyard
,"     APPLICANT:  Baldomero M. Olivera
,"     TITLE OF INVENTION:  Segregated Folding Determinants
,"     TITLE OF INVENTION:  for Small Disulfide-Rich Peptides
,"     NUMBER OF SEQUENCES: 25
.      CORRESPONDENCE ADDRESS:
.        ADDRESSEE:  Thorpe, No. 5231011th & Western
.        STREET:  9035 South 700 East, Suite 200
.        CITY:  Sandy
.        STATE:  Utah
.        COUNTRY: USA
.        ZIP:  84070
.      COMPUTER READABLE FORM:
.        MEDIUM TYPE: Diskette, 3.5 inch, 720 Kb storage
.        COMPUTER: Compaq LTE/286
.        OPERATING SYSTEM:  DOS 4.01
.        SOFTWARE:  Word Perfect 5.1
.      CURRENT APPLICATION DATA:
.        APPLICATION NUMBER: US/07/689,693B
.        FILING DATE: 19910418
.        CLASSIFICATION: 530
.      PRIOR APPLICATION DATA:
.        APPLICATION NUMBER: none
.        FILING DATE:  na
.      ATTORNEY/AGENT INFORMATION:
.        NAME: Western, M. Wayne
.        REGISTRATION NUMBER:  22,788
.        REFERENCE/DOCKET NUMBER: 9925
.      TELECOMMUNICATION INFORMATION:
.        TELEPHONE:  (801) 566-6633
.        TELEFAX:   (801) 566-0750
.      INFORMATION FOR SEQ ID NO:  24:
.        SEQUENCE CHARACTERISTICS:
.          LENGTH:  52 amino acids
.          TYPE:  AMINO ACID
.          TOPOLOGY: linear
.          MOLECULE TYPE: peptide
.        FEATURE:
.          NAME/KEY:  Signal/Pro sequence for synthesis of
.          NAME/KEY:  three loop conotoxin from Circler conotoxin
.          IDENTIFICATION METHOD:  Libraries were created
.          IDENTIFICATION METHOD:  using oligo-dT primed pUC13 vector
US-07-689-693B-24

Query Match        45.5%;   Score 191;  DB 1;  Length 52;
Best Local Similarity  72.9%;  Pred. No. 2.5e-14;
Matches  35;  Conservative  8;  Mismatches  5;  Indels  0;  Gaps  0;

Qy    4 MSKLGVLLTVCLLLFPLTALPLDGDQPADRPAERMQDDISSDEHPLFD 51
        |||||:|||:|||||||||||:|||:||:||:|::|:::|||||:||
Db    1 MSKLGALLTICLLLFSLTAVPLDGDQHADQPAQRLQDRIPTEDHPLFD 48

RESULT 3
US-08-700-442A-9
```

```
; Sequence 9, Application US/08700442A
; Patent No. 5861480
; GENERAL INFORMATION:
,"     APPLICANT:  Sheila ATTENBOROUGH
,"     APPLICANT:  Willem Frans BROEKAERT
,"     APPLICANT:  Rupert William OSBORN
,"     APPLICANT:  John Anthony RAY
,"     APPLICANT:  Sarah Bronwen REES
,"     APPLICANT:  Ravindra Haribhai TAILOR
,"     TITLE OF INVENTION:  ANTIMICROBIAL PROTEINS FROM ARALIA AND
,"     TITLE OF INVENTION:  IMPATIENS
,"     NUMBER OF SEQUENCES: 21
.      CORRESPONDENCE ADDRESS:
.        ADDRESSEE:  Pillsbury Madison & Sutro, L.L.P.
.        STREET:  1100 New York Avenue, N.W.
.        CITY:  Washington
.        STATE:  D.C.
.        COUNTRY: USA
.        ZIP:  20005-3918
.      COMPUTER READABLE FORM:
.        MEDIUM TYPE:  Floppy disk
.        COMPUTER: IBM PC compatible
.        OPERATING SYSTEM:  PC-DOS/MS-DOS
.        SOFTWARE:  Microsoft Word
.      CURRENT APPLICATION DATA:
.        APPLICATION NUMBER: US/08/700,442A
.        FILING DATE: 19-AUG-1996
.        CLASSIFICATION: 514
.      PRIOR APPLICATION DATA:
.        APPLICATION NUMBER:  PCT/GB95/00509
.        FILING DATE:  09-MAR-1995
.      PRIOR APPLICATION DATA:
.        APPLICATION NUMBER:  GB 9404807.1
.        FILING DATE:  11-MAR-1994
.      INFORMATION FOR SEQ ID NO:  9:
.        SEQUENCE CHARACTERISTICS:
.          LENGTH:  333 amino acids
.          TYPE:  amino acid
.          STRANDEDNESS:  single
.          TOPOLOGY: linear
.          MOLECULE TYPE: protein
.        ORIGINAL SOURCE:
.          ORGANISM:  FIGURE 10
US-08-700-442A-9

Query Match        17.4%;   Score 73;  DB 2;  Length 333;
Best Local Similarity  28.0%;  Pred. No. 1.5;
Matches  23;  Conservative  13;  Mismatches  26;  Indels  20;  Gaps  4;

Qy    4 MSKLGVLLTVCLLLFPLTAL------------PLDGDQPADRPAE---RMQDDISSDEHPLFD 51
        :|:|:::|::::||:|  :|||    :|:| :|:  |
Db    1 MVQKGVFGVLLLFICSTLTSADSKPNPTKEEEPAKKPDEVSVKSGGPEVSEDQY----- 56

Qy   52 KRQNCCNGGCSSKWCRDHARCC 73
        | |:|| |:||::|:|:
Db   57 -RHRCCAWGPGRKYCK--RWC 74

RESULT 4
US-08-831-028-9
; Sequence 9, Application US/08831028
; Patent No. 6150588
; GENERAL INFORMATION:
,"     APPLICANT:  Sheila ATTENBOROUGH
,"     APPLICANT:  Willem Frans BROEKAERT
,"     APPLICANT:  Rupert William OSBORN
,"     APPLICANT:  John Anthony RAY
,"     APPLICANT:  Sarah Bronwen REES
,"     APPLICANT:  Ravindra Haribhai TAILOR
,"     TITLE OF INVENTION:  ANTIMICROBIAL PROTEINS FROM ARALIA AND
,"     TITLE OF INVENTION:  IMPATIENS
,"     NUMBER OF SEQUENCES: 21
.      CORRESPONDENCE ADDRESS:
```

```
;    ADDRESSEE: Zeneca, Inc.
;    STREET: 1200 South 47th Street
;    CITY: Richmond
;    STATE: CA
;    COUNTRY: USA
;    ZIP: 94804
;    COMPUTER READABLE FORM:
;    MEDIUM TYPE: Floppy disk
;    COMPUTER: IBM PC compatible
;    OPERATING SYSTEM: PC-DOS/MS-DOS
;    SOFTWARE: Microsoft Word
;    CURRENT APPLICATION DATA:
;    APPLICATION NUMBER: US/08/831,028
;    FILING DATE: 04-APR-1997
;    CLASSIFICATION: 800
;    PRIOR APPLICATION DATA:
;    APPLICATION NUMBER: US 08/700,442
;    FILING DATE: 19-AUG-1996
;    PRIOR APPLICATION DATA:
;    APPLICATION NUMBER: PCT/GB95/00509
;    FILING DATE: 09-MAR-1995
;    PRIOR APPLICATION DATA:
;    APPLICATION NUMBER: GB 9404807.1
;    FILING DATE: 11-MAR-1994
; INFORMATION FOR SEQ ID NO: 9:
;    SEQUENCE CHARACTERISTICS:
;    LENGTH: 333 amino acids
;    TYPE: amino acid
;    STRANDEDNESS: single
;    TOPOLOGY: linear
;    MOLECULE TYPE: protein
;    ORIGINAL SOURCE: FIGURE 10
US-08-831-028-9

Query Match        17.4%;  Score 73;  DB 3;  Length 333;
Best Local Similarity   28.0%;  Pred. No. 1.5;
Matches   23;  Conservative   13;  Mismatches   26;  Indels   20;  Gaps   4;

Qy     4 MSKLGVLLTVCLLLFPLTAL--------PLDGDQOPADRPAE----RMQDDISSDEHPLFD 51
           |:|||:|| :||| :|:|||        ::||:||| ::|| |:
Db     1 MVQKGVVFGVLLILFICSLTSADSKPNTKEEPAKKPDEVSVKSGGPEVSEDQY----- 56

Qy    52 KRQNCCNGGCSSKWCRDHARCC 73
           |:|| ||::| |:|| |:
Db    57 -RHRCCAWGPGRKYCK---RWC 74

RESULT 5
US-08-137-800-37
; Sequence 37, Application US/08137800
; Patent No. 5514774
; GENERAL INFORMATION:
;    APPLICANT: Olivera, Baldomero M.
;    APPLICANT: Cruz, Lourdes J.
;    APPLICANT: Hillyard, David R.
;    APPLICANT: McIntosh, J. Michael
;    APPLICANT: Santos, Ameurfina D.
;    TITLE OF INVENTION: Conotoxin Peptides
;    NUMBER OF SEQUENCES: 53
;    CORRESPONDENCE ADDRESS:
;    ADDRESSEE: Venable, Baetjer, Howard & Civiletti
;    STREET: 1201 New York Avenue N.W., Suite 1000
;    CITY: Washington
;    STATE: DC
;    ZIP: 20005
;    COMPUTER READABLE FORM:
;    MEDIUM TYPE: Floppy disk
;    COMPUTER: IBM PC compatible
;    OPERATING SYSTEM: PC-DOS/MS-DOS
;    SOFTWARE: WordPerfect 5.1
;    CURRENT APPLICATION DATA:
;    APPLICATION NUMBER: US/08/137,800
;    FILING DATE: 19-OCT-1993
;    CLASSIFICATION: 530
;    ATTORNEY/AGENT INFORMATION:
;    NAME: Ihnen, Jeffrey L.
;    REGISTRATION NUMBER: 28,957
;    REFERENCE/DOCKET NUMBER: 24260-104763
;    TELECOMMUNICATION INFORMATION:
;    TELEPHONE: 202-962-4810
;    TELEFAX: 202-962-8300
; INFORMATION FOR SEQ ID NO: 37:
;    SEQUENCE CHARACTERISTICS:
;    LENGTH: 64 amino acids
;    TYPE: amino acid
;    TOPOLOGY: linear
;    MOLECULE TYPE: peptide
;    HYPOTHETICAL: NO
;    ANTI-SENSE: NO
;    ORIGINAL SOURCE:
;    ORGANISM: Conus striatus
US-08-137-800-37

Query Match        17.3%;  Score 72.5;  DB 1;  Length 64;
Best Local Similarity   31.4%;  Pred. No. 0.32;
Matches   22;  Conservative   11;  Mismatches   24;  Indels   13;  Gaps   4;

Qy     9 VLLTVCLLLFPLTALPLDGDQPADRPAERMQD---DISDEHPLFDKRQNCCNGGCSSKW 65
           ::|:|| :::|| |: :: | |::::|| :::||| |
Db     5 MMFTVFLVVLATTVV---SFPSDRASDGRDDEAKDERSDMHE-SDRKEICCNPACGPKY 60

Qy    66 CRDHARCCGR 75
           ||| |
Db    61 -----SCGR 64

RESULT 6
US-08-137-800-39
; Sequence 39, Application US/08137800
; Patent No. 5514774
; GENERAL INFORMATION:
;    APPLICANT: Olivera, Baldomero M.
;    APPLICANT: Cruz, Lourdes J.
;    APPLICANT: Hillyard, David R.
;    APPLICANT: McIntosh, J. Michael
;    APPLICANT: Santos, Ameurfina D.
;    TITLE OF INVENTION: Conotoxin Peptides
;    NUMBER OF SEQUENCES: 53
;    CORRESPONDENCE ADDRESS:
;    ADDRESSEE: Venable, Baetjer, Howard & Civiletti
;    STREET: 1201 New York Avenue N.W., Suite 1000
;    CITY: Washington
;    STATE: DC
;    ZIP: 20005
;    COMPUTER READABLE FORM:
;    MEDIUM TYPE: Floppy disk
;    COMPUTER: IBM PC compatible
;    OPERATING SYSTEM: PC-DOS/MS-DOS
;    SOFTWARE: WordPerfect 5.1
;    CURRENT APPLICATION DATA:
;    APPLICATION NUMBER: US/08/137,800
;    FILING DATE: 19-OCT-1993
;    CLASSIFICATION: 530
;    ATTORNEY/AGENT INFORMATION:
;    NAME: Ihnen, Jeffrey L.
;    REGISTRATION NUMBER: 28,957
;    REFERENCE/DOCKET NUMBER: 24260-104763
;    TELECOMMUNICATION INFORMATION:
;    TELEPHONE: 202-962-4810
;    TELEFAX: 202-962-8300
; INFORMATION FOR SEQ ID NO: 39:
;    SEQUENCE CHARACTERISTICS:
;    LENGTH: 64 amino acids
;    TYPE: amino acid
;    TOPOLOGY: linear
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; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Conus striatus
US-08-137-800-39

Query Match   17.3%;   Score 72.5; DB 1; Length 64;
Best Local Similarity 31.4%; Pred. No. 0.32;
Matches 22; Conservative 11; Mismatches 24; Indels 13; Gaps 4;

Qy   9 VLLTVCLLLFPLTAIPLDGDQPADRPAERMQD---DISSDEHPLFDKRQNCCNGGCSSKW 65
           ::||||:|| ||:: ||| :: |||| | ::: ||||| |:: ||| ||| :
Db   5 MMFTVFLLVVLATTVV---SFPSDRASDGRDDEAKDERSDMHE-SDRKEICCNPACGPKY 60

Qy   66 CRDHARCCGR 75
           |||
Db   61 ------SCGR 64

RESULT 7
US-08-477-383-37
; Sequence 37, Application US/08477383
; Patent No. 5589340
; GENERAL INFORMATION:
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Hillyard, David R.
; APPLICANT: Macintosh, J. Michael
; APPLICANT: Santos, Ameurfino S.
; TITLE OF INVENTION: Conotoxin Peptides
; NUMBER OF SEQUENCES: 59
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Venable, Baetjer, Howard & Civiletti
; STREET: 1201 New York Avenue, N.W., Suite 1000
; CITY: Washington
; STATE: DC
; COUNTRY: U.S.A.
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/477,383
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/137,800
; FILING DATE: 19-OCT-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/084,848
; FILING DATE: 29-JUN-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Ihnen, Jeffrey L.
; REGISTRATION NUMBER: 28,957
; REFERENCE/DOCKET NUMBER: 24260-107673
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-962-4810
; TELEFAX: 202-962-8300
; INFORMATION FOR SEQ ID NO: 37:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 64 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ORIGINAL SOURCE:
; ORGANISM: Conus striatus
US-08-477-383-37

Query Match   17.3%;   Score 72.5; DB 1; Length 64;
Best Local Similarity 31.4%; Pred. No. 0.32;
Matches 22; Conservative 11; Mismatches 24; Indels 13; Gaps 4;

Qy   9 VLLTVCLLLFPLTAIPLDGDQPADRPAERMQD---DISSDEHPLFDKRQNCCNGGCSSKW 65
           ::||||:|| ||:: ||| :: |||| | ::: ||||| |:: ||| ||| :
Db   5 MMFTVFLLVVLATTVV---SFPSDRASDGRDDEAKDERSDMHE-SDRKEICCNPACGPKY 60

Qy   66 CRDHARCCGR 75
           |||
Db   61 ------SCGR 64

RESULT 8
US-08-477-383-39
; Sequence 39, Application US/08477383
; Patent No. 5589340
; GENERAL INFORMATION:
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Hillyard, David R.
; APPLICANT: Macintosh, J. Michael
; APPLICANT: Santos, Ameurfino S.
; TITLE OF INVENTION: Conotoxin Peptides
; NUMBER OF SEQUENCES: 59
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Venable, Baetjer, Howard & Civiletti
; STREET: 1201 New York Avenue, N.W., Suite 1000
; CITY: Washington
; STATE: DC
; COUNTRY: U.S.A.
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/477,383
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/137,800
; FILING DATE: 19-OCT-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/084,848
; FILING DATE: 29-JUN-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Ihnen, Jeffrey L.
; REGISTRATION NUMBER: 28,957
; REFERENCE/DOCKET NUMBER: 24260-107673
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-962-4810
; TELEFAX: 202-962-8300
; INFORMATION FOR SEQ ID NO: 39:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 64 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ORIGINAL SOURCE:
; ORGANISM: Conus striatus
US-08-477-383-39

Query Match   17.3%;   Score 72.5; DB 1; Length 64;
Best Local Similarity 31.4%; Pred. No. 0.32;
Matches 22; Conservative 11; Mismatches 24; Indels 13; Gaps 4;

Qy   9 VLLTVCLLLFPLTAIPLDGDQPADRPAERMQD---DISSDEHPLFDKRQNCCNGGCSSKW 65
           ::||||:|| ||:: ||| :: |||| | ::: ||||| |:: ||| ||| :
Db   5 MMFTVFLLVVLATTVV---SFPSDRASDGRDDEAKDERSDMHE-SDRKEICCNPACGPKY 60

Qy   66 CRDHARCCGR 75
            |||
Db   61 -----SCGR 64

RESULT 9
US-08-487-174-37
; Sequence 37, Application US/08487174
; Patent No. 5595972
; GENERAL INFORMATION:
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Hillyard, David R.
; APPLICANT: Macintosh, J. Michael
; APPLICANT: Santos, Ameurfino S.
; TITLE OF INVENTION: Conotoxin Peptides
; NUMBER OF SEQUENCES: 59
; CORRESPONDENCE ADDRESS:
;   ADDRESSEE: Venable, Baetjer, Howard & Civiletti
;   STREET: 1201 New York Avenue, N.W., Suite 1000
;   CITY: Washington
;   STATE: DC
;   COUNTRY: U.S.A.
;   ZIP: 20005
; COMPUTER READABLE FORM:
;   MEDIUM TYPE: Floppy disk
;   COMPUTER: IBM PC compatible
;   OPERATING SYSTEM: PC-DOS/MS-DOS
;   SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/08/487,174
;   FILING DATE: 07-JUN-1995
;   CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
;   APPLICATION NUMBER: US 08/137,800
;   FILING DATE: 19-OCT-1993
; PRIOR APPLICATION DATA:
;   APPLICATION NUMBER: US 08/084,848
;   FILING DATE: 29-JUN-1993
; ATTORNEY/AGENT INFORMATION:
;   NAME: Ihnen, Jeffrey L.
;   REGISTRATION NUMBER: 28,957
;   REFERENCE/DOCKET NUMBER: 24260-107673
; TELECOMMUNICATION INFORMATION:
;   TELEPHONE: 202-962-4810
;   TELEFAX: 202-962-8300
; INFORMATION FOR SEQ ID NO: 37:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 64 amino acids
;   TYPE: amino acid
;   STRANDEDNESS:
;   TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ORIGINAL SOURCE:
;   ORGANISM: Conus striatus
US-08-487-174-37

Query Match   17.3%; Score 72.5; DB 1; Length 64;
Best Local Similarity 31.4%; Pred. No. 0.32;
Matches 22; Conservative 11; Mismatches 24; Indels 13; Gaps 4;

Qy   9 VLLTVCLLLFPLTALPLDGDQPADRPAERMQD---DISSDEHPLFDKRQNCCNGGCSSKW 65
          ::|||::|: : |:: |||| : ||| | ::: ||: ||:
Db   5 MMFTVFLLVVLATTVV---SFPSDRASDGRDDEAKDERSDMHE-SDRKEICCNPACGPKY 60

Qy   66 CRDHARCCGR 75
            |||
Db   61 -----SCGR 64

RESULT 10

US-08-487-174-39
; Sequence 39, Application US/08487174
; Patent No. 5595972
; GENERAL INFORMATION:
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Hillyard, David R.
; APPLICANT: Macintosh, J. Michael
; APPLICANT: Santos, Ameurfino S.
; TITLE OF INVENTION: Conotoxin Peptides
; NUMBER OF SEQUENCES: 59
; CORRESPONDENCE ADDRESS:
;   ADDRESSEE: Venable, Baetjer, Howard & Civiletti
;   STREET: 1201 New York Avenue, N.W., Suite 1000
;   CITY: Washington
;   STATE: DC
;   COUNTRY: U.S.A.
;   ZIP: 20005
; COMPUTER READABLE FORM:
;   MEDIUM TYPE: Floppy disk
;   COMPUTER: IBM PC compatible
;   OPERATING SYSTEM: PC-DOS/MS-DOS
;   SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/08/487,174
;   FILING DATE: 07-JUN-1995
;   CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
;   APPLICATION NUMBER: US 08/137,800
;   FILING DATE: 19-OCT-1993
; PRIOR APPLICATION DATA:
;   APPLICATION NUMBER: US 08/084,848
;   FILING DATE: 29-JUN-1993
; ATTORNEY/AGENT INFORMATION:
;   NAME: Ihnen, Jeffrey L.
;   REGISTRATION NUMBER: 28,957
;   REFERENCE/DOCKET NUMBER: 24260-107673
; TELECOMMUNICATION INFORMATION:
;   TELEPHONE: 202-962-4810
;   TELEFAX: 202-962-8300
; INFORMATION FOR SEQ ID NO: 39:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 64 amino acids
;   TYPE: amino acid
;   STRANDEDNESS:
;   TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ORIGINAL SOURCE:
;   ORGANISM: Conus striatus
US-08-487-174-39

Query Match   17.3%; Score 72.5; DB 1; Length 64;
Best Local Similarity 31.4%; Pred. No. 0.32;
Matches 22; Conservative 11; Mismatches 24; Indels 13; Gaps 4;

Qy   9 VLLTVCLLLFPLTALPLDGDQPADRPAERMQD---DISSDEHPLFDKRQNCCNGGCSSKW 65
          ::|||::|: : |:: |||| : ||| | ::: ||: ||:
Db   5 MMFTVFLLVVLATTVV---SFPSDRASDGRDDEAKDERSDMHE-SDRKEICCNPACGPKY 60

Qy   66 CRDHARCCGR 75
            |||
Db   61 -----SCGR 64

RESULT 11
US-08-480-750-37
; Sequence 37, Application US/08480750
; Patent No. 563347
; GENERAL INFORMATION:
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Hillyard, David R.

```
;  APPLICANT: Macintosh, J. Michael
;  APPLICANT: Santos, Ameurfino S.
;  TITLE OF INVENTION: Conotoxin Peptides
;  NUMBER OF SEQUENCES: 59
;  CORRESPONDENCE ADDRESS:
;  ADDRESSEE: Venable, Baetjer, Howard & Civiletti
;  STREET: 1201 New York Avenue, N.W., Suite 1000
;  CITY: Washington
;  STATE: DC
;  COUNTRY: U.S.A.
;  ZIP: 2005
;  COMPUTER READABLE FORM:
;  MEDIUM TYPE: Floppy disk
;  COMPUTER: IBM PC compatible
;  OPERATING SYSTEM: PC-DOS/MS-DOS
;  SOFTWARE: PatentIn Release #1.0, Version #1.30
;  CURRENT APPLICATION DATA:
;  APPLICATION NUMBER: US/08/480,750
;  FILING DATE: 07-JUN-1995
;  CLASSIFICATION: 530
;  PRIOR APPLICATION DATA:
;  APPLICATION NUMBER: US 08/137,800
;  FILING DATE: 19-OCT-1993
;  PRIOR APPLICATION DATA:
;  APPLICATION NUMBER: US 08/084,848
;  FILING DATE: 29-JUN-1993
;  ATTORNEY/AGENT INFORMATION:
;  NAME: Ihnen, Jeffrey L.
;  REGISTRATION NUMBER: 28,957
;  REFERENCE/DOCKET NUMBER: 24260-107673
;  TELECOMMUNICATION INFORMATION:
;  TELEPHONE: 202-962-4810
;  TELEFAX: 202-962-8300
;  INFORMATION FOR SEQ ID NO: 37:
;  SEQUENCE CHARACTERISTICS:
;  LENGTH: 64 amino acids
;  TYPE: amino acid
;  STRANDEDNESS:
;  TOPOLOGY: linear
;  MOLECULE TYPE: peptide
;  HYPOTHETICAL: NO
;  ORIGINAL SOURCE:
;  ORGANISM: Conus striatus
US-08-480-750-37

Query Match             17.3%;  Score 72.5;  DB 1;  Length 64;
Best Local Similarity   31.4%;  Pred. No. 0.32;
Matches  22;  Conservative  11;  Mismatches  24;  Indels  13;  Gaps  4;

Qy   9  VLLTVCLLLFPLTALPLDGDQPADRPAERMQD---DISSDEHPLFDKRQNCCNGGCSSKW  65
          :: ||:||:|: | :: ||:: |::| :|:::  |:|: |||||
Db   5  MMFTVFLLVVLATTVV---SFPSDRASDGRDDEAKDERSDMHE-SDRKEICCNPACGPKY  60

Qy  66  CRDHARCCGR  75
              |||
Db  61  ------SCGR  64


RESULT 12
US-08-480-750-39
;  Sequence 39, Application US/08480750
;  Patent No. 5633347
;  GENERAL INFORMATION:
;  APPLICANT: Olivera, Baldomero M.
;  APPLICANT: Cruz, Lourdes J.
;  APPLICANT: Hillyard, David R.
;  APPLICANT: Macintosh, J. Michael
;  APPLICANT: Santos, Ameurfino S.
;  TITLE OF INVENTION: Conotoxin Peptides
;  NUMBER OF SEQUENCES: 59
;  CORRESPONDENCE ADDRESS:
;  ADDRESSEE: Venable, Baetjer, Howard & Civiletti
;  STREET: 1201 New York Avenue, N.W., Suite 1000
;  CITY: Washington
;  STATE: DC
;  COUNTRY: U.S.A.
;  ZIP: 2005
;  COMPUTER READABLE FORM:
;  MEDIUM TYPE: Floppy disk
;  COMPUTER: IBM PC compatible
;  OPERATING SYSTEM: PC-DOS/MS-DOS
;  SOFTWARE: PatentIn Release #1.0, Version #1.30
;  CURRENT APPLICATION DATA:
;  APPLICATION NUMBER: US/08/480,750
;  FILING DATE: 07-JUN-1995
;  CLASSIFICATION: 530
;  PRIOR APPLICATION DATA:
;  APPLICATION NUMBER: US 08/137,800
;  FILING DATE: 19-OCT-1993
;  PRIOR APPLICATION DATA:
;  APPLICATION NUMBER: US 08/084,848
;  FILING DATE: 29-JUN-1993
;  ATTORNEY/AGENT INFORMATION:
;  NAME: Ihnen, Jeffrey L.
;  REGISTRATION NUMBER: 28,957
;  REFERENCE/DOCKET NUMBER: 24260-107673
;  TELECOMMUNICATION INFORMATION:
;  TELEPHONE: 202-962-4810
;  TELEFAX: 202-962-8300
;  INFORMATION FOR SEQ ID NO: 39:
;  SEQUENCE CHARACTERISTICS:
;  LENGTH: 64 amino acids
;  TYPE: amino acid
;  STRANDEDNESS:
;  TOPOLOGY: linear
;  MOLECULE TYPE: peptide
;  HYPOTHETICAL: NO
;  ORIGINAL SOURCE:
;  ORGANISM: Conus striatus
US-08-480-750-39

Query Match             17.3%;  Score 72.5;  DB 1;  Length 64;
Best Local Similarity   31.4%;  Pred. No. 0.32;
Matches  22;  Conservative  11;  Mismatches  24;  Indels  13;  Gaps  4;

Qy   9  VLLTVCLLLFPLTALPLDGDQPADRPAERMQD---DISSDEHPLFDKRQNCCNGGCSSKW  65
          :: ||:||:|: | :: ||:: |::| :|:::  |:|: |||||
Db   5  MMFTVFLLVVLATTVV---SFPSDRASDGRDDEAKDERSDMHE-SDRKEICCNPACGPKY  60

Qy  66  CRDHARCCGR  75
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Db  61  ------SCGR  64


RESULT 13
5223423-3
;  Patent No. 5223423
;  APPLICANT: FRANCHINI, GENOVEFFA; WONG-STAAL, FLOSSIE;
;  GALLO, ROBERT
;  TITLE OF INVENTION: CHARACTERIZATION OF REPLICATION COMPETENT
;  HUMAN IMMUNODEFICIENCY TYPE 2 PROVIRAL CLONE HIV-2 SBL/ISY
;  NUMBER OF SEQUENCES: 4
;  CURRENT APPLICATION DATA:
;  APPLICATION NUMBER: US/07/331,212
;  FILING DATE: 03-31-1989
; SEQ ID NO:3;
;  LENGTH: 3025
5223423-3

Query Match             17.3%;  Score 72.5;  DB 6;  Length 3025;
Best Local Similarity   23.7%;  Pred. No. 17;
Matches  22;  Conservative  14;  Mismatches  24;  Indels  33;  Gaps  4;

Qy    6  KLGVLLTVCLLLFPLTALPLDG------------DQPADRPAERMQDDISSDE-------  46
          |:| :|| ||| ||
Db  1821  KLSIFLACLLLATISILDMETPLKAPESSLGSYNEFSSSRTSEQ---DVATQELANQGEE  1877
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Qy          47 ------HPLFDKRQNCNGGCSSKWCRDHARCC 73
                      ||  ||  :||||||  :|: |
Db        1878 ILSQLYRPL------ETCNNKCFCKGCCFHCQLC 1905

RESULT 14
US-09-488-799-31
; Sequence 31, Application US/09488799
; Patent No. 6268473
; GENERAL INFORMATION:
;   APPLICANT: Olivera, Baldomero M.
;   APPLICANT: Layer, Richard T.
;   APPLICANT: Watkins, Maren
;   APPLICANT: Hillyard, David R.
;   APPLICANT: McIntosh, J. Michael
;   APPLICANT: Schoenfeld, Robert
;   APPLICANT: Jones, Robert M.
;   TITLE OF INVENTION: Alpha Conotoxin Peptides
;   FILE REFERENCE: Alphas 1
;   CURRENT APPLICATION NUMBER: US/09/488,799
;   CURRENT FILING DATE: 2000-01-21
;   EARLIER APPLICATION NUMBER: 60/116,881
;   EARLIER FILING DATE: 1999-01-22
;   EARLIER APPLICATION NUMBER: 60/116,882
;   EARLIER FILING DATE: 1999-01-22
;   NUMBER OF SEQ ID NOS: 101
;   SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 31
;   LENGTH: 59
;   TYPE: PRT
;   ORGANISM: Conus striatus
US-09-488-799-31

Query Match             17.0%;  Score 71.5;  DB 3;  Length 59;
Best Local Similarity   31.9%;  Pred. No. 0.38;  Indels 13;  Gaps  4;
Matches  22;  Conservative  10;  Mismatches  24;

Qy          10 LLTVCLLLFPLTALPLDGDQPADRPAERMQD---DISSDEHPLFDKRQNCNGGCSSKWC 66
                 :|||:|  || :: |           |  |:   | |||  ||| : ||| |||| ||
Db           1 MFTVFLLVVLATTVV---SFPSDRASDGRDDEAKDERSDMHE-SDRKBICCNPACGPKY- 55

Qy          67 RDHARCCGR 75
                    ||
Db          56 -----SCGR 59

RESULT 15
US-09-061-026-22
; Sequence 22, Application US/09061026
; Patent No. 6077934
; GENERAL INFORMATION:
;   APPLICANT: Jacobsen, Richard
;   APPLICANT: Olivera, Baldomero M.
;   TITLE OF INVENTION: Contryphan Peptides
;   NUMBER OF SEQUENCES: 29
;   CORRESPONDENCE ADDRESS:
;     ADDRESSEE: Rothwell, Figg, Ernst & Kurz, p.c.
;     STREET: 755 Thirteenth Street N.W., Suite 701-E
;     CITY: Washington
;     STATE: D.C.
;     COUNTRY: USA
;     ZIP: 20004
;   COMPUTER READABLE FORM:
;     MEDIUM TYPE: Floppy disk
;     COMPUTER: IBM PC compatible
;     OPERATING SYSTEM: PC-DOS/MS-DOS
;     SOFTWARE: PatentIn Release #1.0, Version #1.30
;   CURRENT APPLICATION DATA:
;     APPLICATION NUMBER: US/09/061,026
;     FILING DATE:
;   CLASSIFICATION:
;   PRIOR APPLICATION DATA:
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;   APPLICATION NUMBER: US 60/068,737
;   FILING DATE: 24-DEC-1997
;   ATTORNEY/AGENT INFORMATION:
;     NAME: Ihnen, Jeffrey L.
;     REGISTRATION NUMBER: 28,957
;     REFERENCE/DOCKET NUMBER: 2314-133
;   TELECOMMUNICATION INFORMATION:
;     TELEPHONE: 202-783-6040
;     TELEFAX: 202-783-6031
;   INFORMATION FOR SEQ ID NO:  22:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH:  63 amino acids
;     TYPE: amino acid
;     TOPOLOGY: linear
;     MOLECULE TYPE: protein
US-09-061-026-22

Query Match             17.0%;  Score 71.5;  DB 3;  Length 63;
Best Local Similarity   30.8%;  Pred. No. 0.41;  Indels 31;  Gaps  4;
Matches  24;  Conservative  6;  Mismatches  17;

Qy           4 MSKLGVL-LTVCLLLFPLTALPLDGDQPADRPAERMQDDISSDEHPLFDKRQNCCNGGCS 62
                 | | :|: |||  :||  ||||||| : :||  ::|
Db           1 MGKLTILVIVAAVLLSAQVMVQGDGDQPADRNA------VPRDDNP--------GGAS 44

Qy          63 SK------------WC 66
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Db          45 GKFMNVLRRSGCPWEPWC 62

Search completed: November 17, 2003, 16:19:24
Job time : 23.1053 secs
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                        GenCore version 5.1.6
           Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on:     November 17, 2003, 16:17:08 ; Search time 37.1053 Seconds
                                         (without alignments)
                                         369.003 Million cell updates/sec

Title:           US-09-910-009A-210
Perfect score:   420
Sequence:        1 GSMMSKLGVLLTVCLLLFPL.........CCNGGCSSKWCRDHARCCGR 75

Scoring table:   BLOSUM62
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Searched:        666188 seqs, 182559486 residues

Total number of hits satisfying chosen parameters:        666188

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Database :       Published_Applications_AA:*
                 1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*
                 2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*
                 3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
                 4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*
                 5: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
                 6: /cgn2_6/ptodata/2/pubpaa/PCTUS_PUBCOMB.pep:*
                 7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*
                 8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
                 9: /cgn2_6/ptodata/2/pubpaa/US09A_PUBCOMB.pep:*
                10: /cgn2_6/ptodata/2/pubpaa/US09B_PUBCOMB.pep:*
                11: /cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep:*
                12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep:*
                13: /cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep:*
                14: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*
                15: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep:*
                16: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
                17: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*
                18: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*
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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	420	100.0	75	11	US-09-910-009A-210	Sequence 210, App
2	372	88.6	76	11	US-09-910-009A-300	Sequence 300, App
3	335	79.8	74	11	US-09-910-009A-375	Sequence 375, App
4	320	76.2	80	11	US-09-910-009A-41	Sequence 41, Appl
5	306.5	73.0	76	11	US-09-910-009A-378	Sequence 378, Appl
6	306	72.9	78	11	US-09-910-009A-38	Sequence 38, Appl
7	304.5	72.5	75	11	US-09-910-009A-262	Sequence 262, App
8	303.5	72.3	78	11	US-09-910-009A-14	Sequence 14, Appl
9	303.5	72.3	78	11	US-09-910-009A-178	Sequence 178, Appl
10	299.5	71.3	74	11	US-09-910-009A-234	Sequence 234, App
11	299.5	71.3	77	11	US-09-910-009A-35	Sequence 35, Appl
12	293.5	69.9	76	11	US-09-910-009A-265	Sequence 265, Appl
13	292.5	69.6	75	11	US-09-910-009A-201	Sequence 201, Appl
14	292.5	69.6	77	11	US-09-910-009A-32	Sequence 32, Appl
15	277.5	66.1	74	11	US-09-910-009A-147	Sequence 147, App
16	271.5	64.6	74	11	US-09-910-009A-144	Sequence 144, App
17	271.5	64.6	75	11	US-09-910-009A-277	Sequence 277, App
18	270.5	64.4	74	11	US-09-910-009A-74	Sequence 74, Appl
19	269.5	64.2	77	11	US-09-910-009A-44	Sequence 44, Appl
20	267.5	63.7	74	11	US-09-910-009A-56	Sequence 56, Appl
21	267.5	63.7	74	11	US-09-910-009A-138	Sequence 138, App
22	267	63.6	75	11	US-09-910-009A-59	Sequence 59, Appl
23	267	63.6	75	11	US-09-910-009A-98	Sequence 98, Appl
24	267	63.6	75	11	US-09-910-009A-135	Sequence 135, App
25	266.5	63.5	73	11	US-09-910-009A-204	Sequence 204, App
26	266	63.3	75	11	US-09-910-009A-11	Sequence 11, Appl
27	266	63.3	76	11	US-09-910-009A-274	Sequence 274, App
28	264	62.9	75	11	US-09-910-009A-101	Sequence 101, App
29	263	62.6	72	11	US-09-910-009A-80	Sequence 80, Appl
30	262.5	62.5	75	11	US-09-910-009A-297	Sequence 297, App
31	262	62.4	68	11	US-09-910-009A-155	Sequence 155, App
32	260	61.9	76	11	US-09-910-009A-152	Sequence 152, App
33	260	61.9	76	11	US-09-910-009A-195	Sequence 195, App
34	259	61.7	75	11	US-09-910-009A-132	Sequence 132, App
35	258.5	61.5	70	11	US-09-910-009A-20	Sequence 20, Appl
36	255.5	60.8	74	11	US-09-910-009A-47	Sequence 47, Appl
37	255	60.7	71	11	US-09-910-009A-117	Sequence 117, App
38	252	60.0	68	11	US-09-910-009A-181	Sequence 181, App
39	252	60.0	75	11	US-09-910-009A-192	Sequence 192, App
40	250.5	59.6	74	11	US-09-910-009A-8	Sequence 8, Appli
41	250.5	59.6	74	11	US-09-910-009A-372	Sequence 372, App
42	250	59.5	65	11	US-09-910-009A-114	Sequence 114, App
43	250	59.5	74	11	US-09-910-009A-123	Sequence 123, App
44	249.5	59.4	69	11	US-09-910-009A-158	Sequence 158, App
45	249.5	59.4	74	11	US-09-910-009A-50	Sequence 50, Appl

ALIGNMENTS

```
RESULT 1
US-09-910-009A-210
; Sequence 210, Application US/09910009A
; Publication No.US20030050234A1
; GENERAL INFORMATION:
;  APPLICANT: University of Utah Research Foundation
;  APPLICANT: Cognetix, Inc.
;  APPLICANT: Olivera, Baldomero M.
;  APPLICANT: McIntosh, J. Michael
;  APPLICANT: Garrett, James B.
;  APPLICANT: Watkins, Maren
;  APPLICANT: Cruz, Lourdes J.
;  APPLICANT: Shon, Ki-Joon
;  APPLICANT: Jacobsen, Richard
;  APPLICANT: Jones, Robert M.
;  APPLICANT: Cartier, G. Edward
;  APPLICANT: Shen, Greg S.
;  APPLICANT: Wagstaff, John D.
;  TITLE OF INVENTION: Mu-Conopeptides
;  FILE REFERENCE: 2314-242
;  CURRENT APPLICATION NUMBER: US/09/910,009A
;  CURRENT FILING DATE: 2001-07-23
;  PRIOR APPLICATION NUMBER: US 60/219,619
;  PRIOR APPLICATION NUMBER: 2000-07-21
;  PRIOR FILING DATE: 2000-07-21
;  PRIOR APPLICATION NUMBER: US 60/245,157
;  PRIOR FILING DATE: 2000-11-03
;  PRIOR APPLICATION NUMBER: US 60/264,319
;  PRIOR FILING DATE: 2001-01-29
;  PRIOR APPLICATION NUMBER: US 60/277,270
;  PRIOR FILING DATE: 2001-03-21
;  NUMBER OF SEQ ID NOS: 520
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 210
;  LENGTH: 75
;  TYPE: PRT
;  ORGANISM: Conus striatus
US-09-910-009A-210
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Query Match              100.0%;  Score 420;  DB 11;  Length 75;
Best Local Similarity    100.0%;  Pred. No. 1.2e-41;
Matches    75;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1 GSMMSKLGVLLTVCLLLFPLTALPLDGDQPADRPAERMQDDISSDEHPLFDKRQNCCNGG 60
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1 GSMMSKLGVLLTVCLLLFPLTALPLDGDQPADRPAERMQDDISSDEHPLFDKRQNCCNGG 60

Qy  61 CSSKWCRDHARCCGR 75
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Db  61 CSSKWCRDHARCCGR 75
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RESULT 2
US-09-910-009A-300
; Sequence 300, Application US/09910009A
; Publication No. US2003005O234A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Garrett, James E.
; APPLICANT: Watkins, Maren
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Shon, Ki-Joon
; APPLICANT: Jacobsen, Richard
; APPLICANT: Jones, Robert M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Shen, Greg S.
; APPLICANT: Wagstaff, John D.
; TITLE OF INVENTION: Mu-Conopeptides
; FILE REFERENCE: 2314-242
; CURRENT APPLICATION NUMBER: US/09/910,009A
; CURRENT FILING DATE: 2001-07-23
; PRIOR APPLICATION NUMBER: US 60/219,619
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: US 60/245,157
; PRIOR FILING DATE: 2000-11-03
; PRIOR APPLICATION NUMBER: US 60/264,319
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: US 60/277,270
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 520
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 300
; LENGTH: 76
; TYPE: PRT
; ORGANISM: Conus stercusmuscarum
US-09-910-009A-300

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Query Match              88.6%;  Score 372;  DB 11;  Length 76;
Best Local Similarity    88.0%;  Pred. No. 4.8e-36;
Matches    66;  Conservative    5;  Mismatches    2;  Indels    2;  Gaps    1;

Qy   3 MMSKLGVLLTVCLLLFPLTALPLDGDQPADRPAERMQDDISSDEHPLFDKRQNCCNG--G 60
         |||||||||:||:|||||||||||||||||||||||||||||:::||||||||||||  |
Db   1 MMSKLGVLLTICLLLFPLIALPLDGDQPADRPAERMQDDISSEKHPLFDKRQRCCNGRRG 60

Qy  61 CSSKWCRDHARCCGR 75
         |||:||||||:||||
Db  61 CSSRWCRDHSRCCGR 75
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RESULT 3
US-09-910-009A-375
; Sequence 375, Application US/09910009A
; Publication No. US2003005O234A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Garrett, James E.
; APPLICANT: Watkins, Maren
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Shon, Ki-Joon
; APPLICANT: Jacobsen, Richard
; APPLICANT: Jones, Robert M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Shen, Greg S.
; APPLICANT: Wagstaff, John D.
; TITLE OF INVENTION: Mu-Conopeptides
; FILE REFERENCE: 2314-242
; CURRENT APPLICATION NUMBER: US/09/910,009A
; CURRENT FILING DATE: 2001-07-23
; PRIOR APPLICATION NUMBER: US 60/219,619
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: US 60/245,157
; PRIOR FILING DATE: 2000-11-03
; PRIOR APPLICATION NUMBER: US 60/264,319
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: US 60/277,270
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 520
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 375
; LENGTH: 74
; TYPE: PRT
; ORGANISM: Conus consors
US-09-910-009A-375

```
Query Match              79.8%;  Score 335;  DB 11;  Length 74;
Best Local Similarity    79.7%;  Pred. No. 9.7e-32;
Matches    59;  Conservative    6;  Mismatches    7;  Indels    2;  Gaps    1;

Qy   3 MMSKLGVLLTVCLLLFPLTALPLDGDQPADRPAERMQDDISSDEHPLFDKRQNCCN--GG 60
         ||||||||||:||||||||| |||:||||||||||||||||:::||||||: :||||
Db   1 MMSKLGVLLTICLLLFPLIALPMDGDQPADRPAERMQDDISSQQHPLFDKRGRCCDVPNA 60

Qy  61 CSSKWCRDHARCCG 74
         ||:|||||||:|||
Db  61 CSGRWCRDHAQCCG 74
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RESULT 4
US-09-910-009A-41
; Sequence 41, Application US/09910009A
; Publication No. US2003005O234A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Garrett, James E.
; APPLICANT: Watkins, Maren
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Shon, Ki-Joon
; APPLICANT: Jacobsen, Richard
; APPLICANT: Jones, Robert M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Shen, Greg S.
; APPLICANT: Wagstaff, John D.
; TITLE OF INVENTION: Mu-Conopeptides
; FILE REFERENCE: 2314-242
; CURRENT APPLICATION NUMBER: US/09/910,009A
; CURRENT FILING DATE: 2001-07-23
; PRIOR APPLICATION NUMBER: US 60/219,619
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: US 60/245,157
; PRIOR FILING DATE: 2000-11-03
; PRIOR APPLICATION NUMBER: US 60/264,319
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: US 60/277,270
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 520

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; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 41
; LENGTH: 80
; TYPE: PRT
; ORGANISM: Conus bullatus
US-09-910-009A-41

Query Match             76.2%;   Score 320;  DB 11;  Length 80;
Best Local Similarity   75.0%;   Pred. No. 6e-30;
Matches  60;  Conservative   7;  Mismatches   5;  Indels   8;  Gaps   3;

Qy     3 MMSKLGVLLTVCLLLFPLTALPLDGDQPADRPAERMQDDISSDEHPLFPDKR--QNCCN-- 58
           |||||||||:||:||||||||||:||||||||||||||:|:|||:|| |  |||
Db     1 MMSKLGVLLTICLLLFPLFALPQDGDQPADRPAERMQDDLSSEQHPLFEKRIVDRCCNKG 60

Qy    59 --GGCSSKWCRDHARCCGR 75
           ||:||||:|:||||
Db    61 NGKRGC-SRWCRDHSRCCGR 79

RESULT 5
US-09-910-009A-378
; Sequence 378, Application US/09910009A
; Publication No.US20030050234A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Garrett, James E.
; APPLICANT: Watkins, Maren
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Shon, Ki-Joon
; APPLICANT: Jacobsen, Richard
; APPLICANT: Jones, Robert M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Shen, Greg S.
; APPLICANT: Wagstaff, John D.
; TITLE OF INVENTION: Mu-Conopeptides
; FILE REFERENCE: 2314-242
; CURRENT APPLICATION NUMBER: US/09/910,009A
; CURRENT FILING DATE: 2001-07-23
; PRIOR APPLICATION NUMBER: US 60/219,619
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: US 60/245,157
; PRIOR FILING DATE: 2000-11-03
; PRIOR APPLICATION NUMBER: US 60/264,319
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: US 60/277,270
; PRIOR FILING DATE: 2001-03-21
; SOFTWARE: PatentIn version 3.0
; NUMBER OF SEQ ID NOS: 520
; SEQ ID NO 378
; LENGTH: 76
; TYPE: PRT
; ORGANISM: Conus consors
US-09-910-009A-378

Query Match             73.0%;   Score 306.5;  DB 11;  Length 76;
Best Local Similarity   76.3%;   Pred. No. 2.1e-28;
Matches  58;  Conservative   5;  Mismatches  10;  Indels   3;  Gaps   1;

Qy     3 MMSKLGVLLTVCLLLFPLTALPLDGDQPADRPAERMQDDISSDEHPLFPDKRQNCC---NG 59
           |||||||||:||:|||||||||:||||||||||||||:||| :|: ||
Db     1 MMSKLGVLLTVCLLLFPLFALPMDGDQPADQPAERMQDDISSEQHPLFDKRQRCCTGKKG 60

Qy    60 GCSSKWCRDHARCCGR 75
           |:||:| ||
Db    61 SCSGKACKSLKCCSGR 76

RESULT 6
US-09-910-009A-38
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; Sequence 38, Application US/09910009A
; Publication No.US20030050234A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Garrett, James E.
; APPLICANT: Watkins, Maren
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Shon, Ki-Joon
; APPLICANT: Jacobsen, Richard
; APPLICANT: Jones, Robert M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Shen, Greg S.
; APPLICANT: Wagstaff, John D.
; TITLE OF INVENTION: Mu-Conopeptides
; FILE REFERENCE: 2314-242
; CURRENT APPLICATION NUMBER: US/09/910,009A
; CURRENT FILING DATE: 2001-07-23
; PRIOR APPLICATION NUMBER: US 60/219,619
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: US 60/245,157
; PRIOR FILING DATE: 2000-11-03
; PRIOR APPLICATION NUMBER: US 60/264,319
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: US 60/277,270
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 520
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 38
; LENGTH: 78
; TYPE: PRT
; ORGANISM: Conus bullatus
US-09-910-009A-38

Query Match             72.9%;   Score 306;  DB 11;  Length 78;
Best Local Similarity   75.6%;   Pred. No. 2.5e-28;
Matches  59;  Conservative   8;  Mismatches   5;  Indels   6;  Gaps   4;

Qy     3 MMSKLGVLLTVCLLLFPLTALPLDGDQPADRPAERMQDDISSDEHPLFDKR--QNCC-NG 59
           |||||||||:||:||||||||:||||||||||||||::|:|||:|| |  ||:||
Db     1 MMSKLGVLLTICLLLFPLFALPQDGDQPADRPAERMQDDISSEQNPLLEKRVGERCCKNG 60

Qy    60 --GCSSKWCRDHARCCGR 75
           ||:|||||||:|||||
Db    61 KRGC-GRWCRDHSRCCGR 77

RESULT 7
US-09-910-009A-262
; Sequence 262, Application US/09910009A
; Publication No. US20030050234A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Garrett, James E.
; APPLICANT: Watkins, Maren
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Shon, Ki-Joon
; APPLICANT: Jacobsen, Richard
; APPLICANT: Jones, Robert M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Shen, Greg S.
; APPLICANT: Wagstaff, John D.
; TITLE OF INVENTION: Mu-Conopeptides
; FILE REFERENCE: 2314-242
; CURRENT APPLICATION NUMBER: US/09/910,009A
; CURRENT FILING DATE: 2001-07-23
; PRIOR APPLICATION NUMBER: US 60/219,619
; PRIOR FILING DATE: 2000-07-21
```

```
; PRIOR APPLICATION NUMBER: US 60/245,157
; PRIOR FILING DATE: 2000-11-03
; PRIOR APPLICATION NUMBER: US 60/264,319
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: US 60/277,270
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 520
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 262
;   LENGTH: 75
;   TYPE: PRT
;   ORGANISM: Conus tulipa
US-09-910-009A-262

Query Match        72.5%;      Score 304.5;  DB 11;  Length 75;
Best Local Similarity   74.7%;      Pred. No. 3.6e-28;
Matches   56;  Conservative    9;  Mismatches    7;  Indels    3;  Gaps    2;

Qy        3  MMSKLGVLLTVCLLLFPLTALPLDGDQPADRPAERMQDDISSDEHPLFDKRQNCCNG--G  60
             ||||||||||||:|||||||||||||||:||||||||||||||||::||||| |||  |
Db        1  MMSKLGVLLTICLLLFPLTALPMDGDBPADRPAERMQDNISSEQHPLFEERHGCCEGPKG  60

Qy       61  CSSKWCRDHARCCGR  75
             |||:|| ||||
Db       61  CSSRRCRPQ-HCCGR  74
```

```
RESULT 8
US-09-910-009A-14
; Sequence 14, Application US/09910009A
; Publication No. US20030050234A1
; GENERAL INFORMATION:
;   APPLICANT: University of Utah Research Foundation
;   APPLICANT: Cognetix, Inc.
;   APPLICANT: Olivera, Baldomero M.
;   APPLICANT: McIntosh, J. Michael
;   APPLICANT: Garrett, James E.
;   APPLICANT: Watkins, Maren
;   APPLICANT: Cruz, Lourdes J.
;   APPLICANT: Shon, Ki-Joon
;   APPLICANT: Jacobsen, Richard
;   APPLICANT: Jones, Robert M.
;   APPLICANT: Cartier, G. Edward
;   APPLICANT: Shen, Greg S.
;   APPLICANT: Wagstaff, John D.
; TITLE OF INVENTION: Mu-Conopeptides
; FILE REFERENCE: 2314-242
; CURRENT APPLICATION NUMBER: US/09/910,009A
; CURRENT FILING DATE: 2001-07-23
; PRIOR APPLICATION NUMBER: US 60/219,619
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: US 60/245,157
; PRIOR FILING DATE: 2000-11-03
; PRIOR APPLICATION NUMBER: US 60/264,319
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: US 60/277,270
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 520
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 14
;   LENGTH: 78
;   TYPE: PRT
;   ORGANISM: Conus aurisiacus
US-09-910-009A-14

Query Match        72.3%;      Score 303.5;  DB 11;  Length 78;
Best Local Similarity   71.8%;      Pred. No. 4.9e-28;
Matches   56;  Conservative    9;  Mismatches   10;  Indels    3;  Gaps    1;

Qy        1  GSMMSKLGVLLTVCLLLFPLTALPLDGDQPADRPAERMQDDISSDEHPLFDKRQNCC---  57
             |||||||||||||:|||||||||||||||||:||||||||||:::||||||||| ||
Db        1  GSMMSKLGVLLTICLLLFPLTAFFMDGDQPADQPADRMQDDISSEQYPLFDKRQKCCTGK  60
```

```
Qy       58  NGGCSSKWCRDHARCCGR  75
             || ||||:|| ||||
Db       61  KGSCSGKACKNLKCCSGR  78
```

```
RESULT 9
US-09-910-009A-178
; Sequence 178, Application US/09910009A
; Publication No. US20030050234A1
; GENERAL INFORMATION:
;   APPLICANT: University of Utah Research Foundation
;   APPLICANT: Cognetix, Inc.
;   APPLICANT: Olivera, Baldomero M.
;   APPLICANT: McIntosh, J. Michael
;   APPLICANT: Garrett, James E.
;   APPLICANT: Watkins, Maren
;   APPLICANT: Cruz, Lourdes J.
;   APPLICANT: Shon, Ki-Joon
;   APPLICANT: Jacobsen, Richard
;   APPLICANT: Jones, Robert M.
;   APPLICANT: Cartier, G. Edward
;   APPLICANT: Shen, Greg S.
;   APPLICANT: Wagstaff, John D.
; TITLE OF INVENTION: Mu-Conopeptides
; FILE REFERENCE: 2314-242
; CURRENT APPLICATION NUMBER: US/09/910,009A
; CURRENT FILING DATE: 2001-07-23
; PRIOR APPLICATION NUMBER: US 60/219,619
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: US 60/245,157
; PRIOR FILING DATE: 2000-11-03
; PRIOR APPLICATION NUMBER: US 60/264,319
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: US 60/277,270
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 520
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 178
;   LENGTH: 78
;   TYPE: PRT
;   ORGANISM: Conus nobilis
US-09-910-009A-178

Query Match        72.3%;      Score 303.5;  DB 11;  Length 78;
Best Local Similarity   71.8%;      Pred. No. 4.9e-28;
Matches   56;  Conservative    9;  Mismatches   10;  Indels    3;  Gaps    1;

Qy        1  GSMMSKLGVLLTVCLLLFPLTALPLDGDQPADRPAERMQDDISSDEHPLFDKRQNCC---  57
             |||||||||||||:|||||||||||||||||:||||||||||:::||||||||| ||
Db        1  GSMMSKLGVLLTICLLLFPLTAFFMDGDQPADQPADRMQDDISSEQYPLFDKRQKCCTGK  60
```

```
Qy       58  NGGCSSKWCRDHARCCGR  75
             || ||||:|| ||
Db       61  KGSCSGKACKNLKCCSGR  78
```

```
RESULT 10
US-09-910-009A-234
; Sequence 234, Application US/09910009A
; Publication No. US20030050234A1
; GENERAL INFORMATION:
;   APPLICANT: University of Utah Research Foundation
;   APPLICANT: Cognetix, Inc.
;   APPLICANT: Olivera, Baldomero M.
;   APPLICANT: McIntosh, J. Michael
;   APPLICANT: Garrett, James E.
;   APPLICANT: Watkins, Maren
;   APPLICANT: Cruz, Lourdes J.
;   APPLICANT: Shon, Ki-Joon
;   APPLICANT: Jacobsen, Richard
;   APPLICANT: Jones, Robert M.
;   APPLICANT: Cartier, G. Edward
;   APPLICANT: Shen, Greg S.
```

; APPLICANT: Wagstaff, John D.
; TITLE OF INVENTION: Mu-Conopeptides
; FILE REFERENCE: 2314-242
; CURRENT APPLICATION NUMBER: US/09/910,009A
; CURRENT FILING DATE: 2001-07-23
; PRIOR APPLICATION NUMBER: US 60/219,619
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: US 60/245,157
; PRIOR FILING DATE: 2000-11-03
; PRIOR APPLICATION NUMBER: US 60/264,319
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: US 60/277,270
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 520
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 234
; LENGTH: 74
; TYPE: PRT
; ORGANISM: Conus tulipa
US-09-910-009A-234

Query Match 71.3%; Score 299.5; DB 11; Length 74;
Best Local Similarity 74.3%; Pred. No. 1.4e-27;
Matches 55; Conservative 9; Mismatches 7; Indels 3; Gaps 2;

```
Qy   4 MSKLGVLLTVCLLLFPLTALPLDGQPADRPAERMQDDISSDEHPLFDKRQNCCNG--GC 61
         |||||||||:|||||||||||| |||:||||||||||||||||||:::|| |||
Db   1 MSKLGVLLTICLLLFPLTALPMDGDEPADRPAERMQDNISSEQHPLFEERHGCCKGPEGC 60

Qy  62 SSKWCRDHARCCGR 75
        ||:|||||||||
Db  61 SSRECRPQ-HCCGR 73
```

RESULT 11
US-09-910-009A-35
; Sequence 35, Application US/09910009A
; Publication No. US20030050234A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Garrett, James E.
; APPLICANT: Watkins, Maren
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Shon, Ki-Joon
; APPLICANT: Jacobsen, Richard
; APPLICANT: Jones, Robert M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Shen, Greg S.
; APPLICANT: Wagstaff, John D.
; TITLE OF INVENTION: Mu-Conopeptides
; FILE REFERENCE: 2314-242
; CURRENT APPLICATION NUMBER: US/09/910,009A
; CURRENT FILING DATE: 2001-07-23
; PRIOR APPLICATION NUMBER: US 60/219,619
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: US 60/245,157
; PRIOR FILING DATE: 2000-11-03
; PRIOR APPLICATION NUMBER: US 60/264,319
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: US 60/277,270
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 520
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 35
; LENGTH: 77
; TYPE: PRT
; ORGANISM: Conus bullatus
US-09-910-009A-35

Query Match 71.3%; Score 299.5; DB 11; Length 77;
Best Local Similarity 74.0%; Pred. No. 1.4e-27;
Matches 57; Conservative 7; Mismatches 8; Indels 5; Gaps 3;

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Qy   3 MMSKLGVLLTVCLLLFPLTALPLDGQPADRPAERMQDDISSDEHPLFDKR--QNCCNG- 59
         ||||||||||:||||||| ||  |||:||||||||||||||||:::|| ||||
Db   1 MMSKLGVLLTICLLLFPLFALRQDGDGQPADRPAERMQDDISSEQNPLLEKRVGDRCCKGK 60

Qy  60 -GCSSKWCRDHARCCGR 75
          :||||||||:||||
Db  61 RGC-GRWCRDHSRCCGR 76
```

RESULT 12
US-09-910-009A-265
; Sequence 265, Application US/09910009A
; Publication No. US20030050234A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Garrett, James E.
; APPLICANT: Watkins, Maren
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Shon, Ki-Joon
; APPLICANT: Jacobsen, Richard
; APPLICANT: Jones, Robert M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Shen, Greg S.
; APPLICANT: Wagstaff, John D.
; TITLE OF INVENTION: Mu-Conopeptides
; FILE REFERENCE: 2314-242
; CURRENT APPLICATION NUMBER: US/09/910,009A
; CURRENT FILING DATE: 2001-07-23
; PRIOR APPLICATION NUMBER: US 60/219,619
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: US 60/245,157
; PRIOR FILING DATE: 2000-11-03
; PRIOR APPLICATION NUMBER: US 60/264,319
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: US 60/277,270
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 520
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 265
; LENGTH: 76
; TYPE: PRT
; ORGANISM: Conus aurisiacus
US-09-910-009A-265

Query Match 69.9%; Score 293.5; DB 11; Length 76;
Best Local Similarity 71.1%; Pred. No. 7e-27;
Matches 54; Conservative 9; Mismatches 10; Indels 3; Gaps 1;

```
Qy   3 MMSKLGVLLTVCLLLFPLTALPLDGQPADRPAERMQDDISSDEHPLFDKRQNCC--NG 59
         |||||||||:|||||||||||| ||:||||||||||||||||:::||||||  ||
Db   1 MMSKLGVLLTICLLLFPLTAFPMDGQPADRMQDDISSEQYPLFDKRQKCCTGRKG 60

Qy  60 GCSSKWCRDHARCCGR 75
        ||:|||||||||||||
Db  61 SCSGKACKNLKCCSGR 76
```

RESULT 13
US-09-910-009A-201
; Sequence 201, Application US/09910009A
; Publication No. US20030050234A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Garrett, James E.

APPLICANT: Watkins, Maren
APPLICANT: Cruz, Lourdes J.
APPLICANT: Shon, Ki-Joon
APPLICANT: Jacobsen, Richard
APPLICANT: Jones, Robert M.
APPLICANT: Cartier, G. Edward
APPLICANT: Shen, Greg S.
APPLICANT: Wagstaff, John D.
TITLE OF INVENTION: Mu-Conopeptides
FILE REFERENCE: 2314-242
CURRENT APPLICATION NUMBER: US/09/910,009A
CURRENT FILING DATE: 2001-07-23
PRIOR APPLICATION NUMBER: US 60/219,619
PRIOR FILING DATE: 2000-07-21
PRIOR APPLICATION NUMBER: US 60/245,157
PRIOR FILING DATE: 2000-11-03
PRIOR APPLICATION NUMBER: US 60/264,319
PRIOR FILING DATE: 2001-01-29
PRIOR APPLICATION NUMBER: US 60/277,270
PRIOR FILING DATE: 2001-03-21
NUMBER OF SEQ ID NOS: 520
SOFTWARE: PatentIn version 3.0
SEQ ID NO 201
LENGTH: 75
TYPE: PRT
ORGANISM: Conus stercusmuscarum
US-09-910-009A-201

Query Match   69.6%;   Score 292.5; DB 11;   Length 75;
Best Local Similarity 72.0%;   Pred. No. 9.1e-27;
Matches   54; Conservative   9; Mismatches   9; Indels   3; Gaps   1;

Qy   4 MSKLGVLLTVCLLLFPLTALPLDGDQPADRPAERMQDDISSDEHPLFDKRQNCC---NGG 60
           |||||||||:||:|||||:|| ||||||||||||||||||::|||||||||| |
Db   1 MSKLGVLLTICLLLFPLTALPMDGDQPADQPADRMQDDISSEQYPLFDKRQKCCTGKKGS 60

Qy 61 CSSKWCRDHARCCGR 75
           ||||:|: |||
Db 61 CSGKACKNLKCCSGR 75

RESULT 14
US-09-910-009A-32
; Sequence 32, Application US/09910009A
; Publication No. US2003050234A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Garrett, James E.
; APPLICANT: Watkins, Maren
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Shon, Ki-Joon
; APPLICANT: Jacobsen, Richard
; APPLICANT: Jones, Robert M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Shen, Greg S.
; APPLICANT: Wagstaff, John D.
; TITLE OF INVENTION: Mu-Conopeptides
; FILE REFERENCE: 2314-242
; CURRENT APPLICATION NUMBER: US/09/910,009A
; CURRENT FILING DATE: 2001-07-23
; PRIOR APPLICATION NUMBER: US 60/219,619
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: US 60/245,157
; PRIOR FILING DATE: 2000-11-03
; PRIOR APPLICATION NUMBER: US 60/264,319
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: US 60/277,270
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 520
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 32
; LENGTH: 77
; TYPE: PRT
; ORGANISM: Conus bullatus
US-09-910-009A-32

Query Match   69.6%;   Score 292.5; DB 11;   Length 77;
Best Local Similarity 72.7%;   Pred. No. 9.3e-27;
Matches   56; Conservative   7; Mismatches   7; Indels   5; Gaps   3;

Qy   3 MSKLGVLLTVCLLLFPLTALPLDGDQPADRPAERMQDDISSDEHPLFDKR--QNCCNG- 59
           |||||||||:||:|||||| |:|||||||||||||||||:::|| |||| :: ||
Db   1 MSKLGVLLTICLLLFPLFALPQDGDQPADRPAERMQDDISSEQNSLLEKRVTDRCCKGK 60

Qy 60 -GCSSKWCRDHARCCGR 75
            |:|||:|:|| |||
Db 61 REC-GRWCRDHSRCCGR 76

RESULT 15
US-09-910-009A-147
; Sequence 147, Application US/09910009A
; Publication No. US2003050234A1
; GENERAL INFORMATION:
; APPLICANT: University of Utah Research Foundation
; APPLICANT: Cognetix, Inc.
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIntosh, J. Michael
; APPLICANT: Garrett, James E.
; APPLICANT: Watkins, Maren
; APPLICANT: Cruz, Lourdes J.
; APPLICANT: Shon, Ki-Joon
; APPLICANT: Jacobsen, Richard
; APPLICANT: Jones, Robert M.
; APPLICANT: Cartier, G. Edward
; APPLICANT: Shen, Greg S.
; APPLICANT: Wagstaff, John D.
; TITLE OF INVENTION: Mu-Conopeptides
; FILE REFERENCE: 2314-242
; CURRENT APPLICATION NUMBER: US/09/910,009A
; CURRENT FILING DATE: 2001-07-23
; PRIOR APPLICATION NUMBER: US 60/219,619
; PRIOR FILING DATE: 2000-07-21
; PRIOR APPLICATION NUMBER: US 60/245,157
; PRIOR FILING DATE: 2000-11-03
; PRIOR APPLICATION NUMBER: US 60/264,319
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: US 60/277,270
; PRIOR FILING DATE: 2001-03-21
; NUMBER OF SEQ ID NOS: 520
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 147
; LENGTH: 74
; TYPE: PRT
; ORGANISM: Conus magus
US-09-910-009A-147

Query Match   66.1%;   Score 277.5; DB 11;   Length 74;
Best Local Similarity 71.6%;   Pred. No. 5e-25;
Matches   53; Conservative   9; Mismatches   9; Indels   3; Gaps   2;

Qy   3 MSKLGVLLTVCLLLFPLTALPLDGDQPADRPAERMQDDISSDEHPLFDKRQNCCN-GGC 61
           |||||||||:||:|||||| |:|||||||||||||||||:::|||||||||:: ||
Db   1 MMSKLGVLLTICLLLFPLTALPMDGDQPADQPADRMQDDISSEQYPLFDKRQKCCGPGGS 60

Qy 62 SSKWCRDH--ARCC 73
           ||:| |||
Db 61 CPVYFRDNFICGCC 74

Search completed: November 17, 2003, 16:26:50
Job time : 38.1053 secs